

BOARD MEETING DATE: May 3, 2013

AGENDA NO. 28

PROPOSAL: Amend Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II; and
Amend Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II

SYNOPSIS: The proposed amendments add additional categories to the streamlined filing/registration program of Rule 222 and clarify and enhance the enforceability and the ability to appeal operating conditions issued pursuant to the provisions of that rule. Rule 219 is proposed to be expanded to exclude several categories of equipment with de minimis emissions from the requirement to obtain written permits. The proposed amendments will further facilitate the streamlining of the District's permitting system.

COMMITTEE: Stationary Source, July 27, 2012 and March 15, 2013 Reviewed

RECOMMENDED ACTIONS:

Adopt the attached resolutions:

1. Certifying the Final Environmental Assessment for Proposed Amended Rule 219- Equipment Not Requiring a Written Permit Pursuant to Regulation II and Proposed Amended Rule 222- Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II;
2. Amending Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II;
3. Amending Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II.

Barry R. Wallerstein, D.Env.
Executive Officer

Background

Proposed Amended Rule (PAR) 219 – Equipment Not Requiring A Written Permit Pursuant To Regulation II - is an administrative rule that provides certain equipment, processes, and operations that emit small amounts of air contaminants an exemption from the SCAQMD permitting requirements under Regulation II - Permits. Staff has identified additional sources of equipment, processes, and operations that emit small amounts of air contaminants that are being proposed to be included in Rule 219. The emissions are further limited using parameters such as maximum fuel usage or hours of operation, and maintain potential risks below one in a million.

Rule 222 - Filing Requirements for Specific Emission Sources Not Requiring A Written Permit Pursuant To Regulation II - provides an alternative to SCAQMD written permits by allowing certain emission sources that meet predetermined criteria to register the emission source in the Rule 222 filing program. These sources do not require a written permit but are required to meet the filing requirements pursuant to the Rule 222 filing program and are subject to operating conditions. The purpose of this amendment is to require specific emission sources that currently have written SCAQMD permits to instead file their information for such equipment under the Rule 222 filing program. The Rule 222 filing program is designed for small emitting sources and any exempt emission sources under Rule 219 that cannot operate in compliance as determined by the Executive Officer.

The SCAQMD initiated amendments to PARs 219 and 222 in June 2012, and staff made multiple visits to manufacturing and material processing facilities and met with industry and members of the community. A public workshop was held on July 19, 2012 and staff received 12 comment letters during the commenting period (July 19 through August 3, 2012) and 5 comment letters after the close of the commenting period. Additionally, a public consultation meeting was held on November 8, 2012 and staff received 10 comments during the open forum of that meeting and an additional 9 comment letters during the commenting period (November 8 through November 16, 2012).

Subsequent to the set-hearing package, two minor clarifications were made to the language in Proposed Amended Rules 219 and 222 which are shown in italicized strike-out underline for deleted language and double underline for revised language.

Proposal

The proposal includes revisions to existing definitions and adds numerous new definitions for equipment and processes and includes a complete exemption from permitting for the following equipment and processes:

- Aerosol can recycling systems [PAR 219 (p)(22)];
- Carpet shearing machines and associated controls [PAR 219 (p)(10)];

- Charbroilers, for non-commercial multi-family residential use [PAR 219 (i)(12)];
- Cosmetic filling stations and related filling equipment [PAR 219 (k)(5)]; and
- Laser cutting, etching, and engraving equipment and associated controls [PAR 219 (e)(8)].

Additionally, under the proposal the following equipment and processes are proposed for inclusion in PAR 219, which are currently subject to Rule 1147 - NOx Reductions from Miscellaneous Sources, and will be transitioned to the filing program under PAR 222:

- Asphalt pavement heaters [PAR 219 (a)(5)];
- Asphalt day tankers [PAR 219 (m)(23)];
- Diesel fueled boilers, capacity and NOx output [PAR 219 (b)(2)];
- Food ovens, capacity and NOx output [PAR 219 (b)(2)];
- Fuel cells, clarification of exemption [PAR 219 (b)(5)];
- Portable diesel fueled heaters, capacity and NOx output [PAR 219 (b)(3)];
- Power pressure washers, capacity and NOx output [PAR 219 (b)(4)]; and
- Tar Pots [PAR 219 (m)(11)].

The proposal also includes the following equipment and processes for inclusion in PAR 219 and then transition said equipment and processes from the permitting program to the Rule 222 filing program:

- ICEs, remote 2-way radio transmission towers, capacity and NOx output [PAR 219 (b)(1)];
- Micro-turbines, capacity and state-certified [PAR 219 (b)(1)]; and
- Storage of odorants for natural gas, propane, or oil with a holding capacity of less than 950 liters (251 gallons) and associated transfer and control equipment [PAR 219 (m)(9)].

Lastly, PARs 219 and 222 include other additional revisions to enhance enforceability and further clarify and update rule requirements.

The proposed amendments to Rule 219 alleviates the need to retrofit certain equipment currently regulated by Rule 1147 - NOx Reductions from Miscellaneous Sources and Rule 1110.2 - Emissions from Gaseous - and Liquid-Fueled Engines, resulting in an estimated 136 pounds per day of total NOx emissions foregone. Staff has determined that there is limited feasibility that these categories of equipment comply with future effective limits in Rules 1110.2 and 1147. The remote location of the piston-type internal combustion engines used at remote two-way transmission towers and the select diesel fueled boilers prohibits the installation of the needed control equipment. The

mobile nature of power pressure washers, portable diesel fueled heaters, asphalt day tankers, asphalt pavement heaters, and the tar pots make emission reductions extremely challenging, if not invalid. The very small emission profile produced from select food ovens precludes the installation of meaningful control.

AQMP and Legal Mandates

The proposed amendments were not previously identified in the Air Quality Management Plan (AQMP). The proposed amendments will improve enforceability of and upon adoption, enhance the compliance with SCAQMD rules and regulations. After adoption, the proposed amendments will be forwarded to the California Air Resources Board and the United States Environmental Protection Agency for inclusion in the State Implementation Plan.

California Environmental Quality Act (CEQA) Analysis

Pursuant to California Environmental Quality Act (CEQA) and SCAQMD Rule 110, the SCAQMD staff prepared a Draft Environmental Assessment (EA) and circulated it for a 45-day public review and comment period from February 8, 2013 to March 26, 2013. No comments were received during the public comment period. The Draft EA has been revised and is now a Final EA. The only environmental topic identified in the Final EA that may be adversely affected by the proposed project is air quality. PARs 219 and 222 would result in 136 pounds of NOx emission reductions foregone. NOx emissions reductions foregone are not direct NOx emission increases, but the loss of expected future emission reductions. To provide a conservative analysis, NOx emission reductions foregone are treated as NOx emission increases and compared to the operational air quality NOx significance threshold of 55 pounds per day. For these reasons, operational air quality impacts associated with implementation of PARs 219 and 222 are potentially significant. Because the proposed project has the potential to generate significant adverse air quality impacts, SCAQMD staff has prepared Findings and a Statement of Overriding Considerations pursuant to state CEQA Guidelines §§15091 and 15093, respectively, regarding adverse environmental impacts that cannot be mitigated to insignificance. Since no mitigation measures were identified that could reduce significant adverse impacts a mitigation monitoring and reporting plan pursuant to CEQA Guidelines §15097 is not required.

Socioeconomic Assessment

Under existing rule language, any affected equipment requiring a written permit is subject to a one-time permit processing fee when applying for a permit, and annual operating and flat emissions fees thereafter. The proposed amendments would replace both the one-time and annual fees for permitted equipment with a reduced Rule 222 initial filing fee and annual renewal fee. There are approximately 241 facilities in a wide variety of industries affected by the proposed amendments.

The proposed amendments to Rules 219 and 222 will provide a net cost benefit to industry, since they will be able to continue business as usual, operate their equipment in the current manner, while paying significantly lower fees.

On October 14, 1994, the Board adopted a resolution that requires staff to address whether the proposed amendments being considered for adoption are in rank order of cost-effectiveness in the AQMP. The proposed amendments to Rules 219 and 222 are not part of the AQMP; therefore, the ranking order of cost-effectiveness is not applicable here.

Implementation and Resource Impacts

Upon adoption of Rules 219 and 222, staff will begin transitioning certain equipment sources, processes and operations that qualify for the exemption in Rule 219 to a more streamlined Rule 222 filing program. No additional resources are required to implement the proposed amendments.

Staff does recognize a cost impact to the SCAQMD which is due to minimal loss in revenue.

Attachments

- A. Summary of Proposed Amended Rules
- B. Rule Development Process
- C. Key Contacts List
- D. Resolution and Attachment
- E. Proposed Amended Rule Language for Rule 219
- F. Proposed Amended Rule Language for Rule 222
- G. Final Staff Report & Appendices
- H. Final Environmental Assessment for Rules 219 and 222

ATTACHMENT A

SUMMARY OF PROPOSED AMENDED RULE

Proposed Amended Rule: 219 – Equipment Not Requiring a Written Permit Pursuant To Regulation II, &

Proposed Amended Rule: 222 – Equipment Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant To Regulation II

- *Add additional sources of equipment, processes, and operations to Rule 219 that emit small amounts of air contaminants*

The proposal includes the following equipment and processes for the inclusion in PAR 219 and provides a complete exemption from permitting for the following:

- **Aerosol can recycling systems** [PAR 219 (p)(22)]
- **Carpet and paper shearing machines** and associated controls [PAR 219 (p)(10)]
- **Charbroiler non-commercial multi-family residential** [PAR 219 (i)(12)]
- **Cosmetic filing stations & Related filling equipment** [PAR 219 (k)(5)]
- **Laser cutting, etching and engraving equipment** [PAR 219 (e)(8)]

- *Add additional sources of equipment, processes, and operations that are currently regulated by Rule 1147 to the Rule 222 filing program in lieu of existing written permits*

The proposal includes the following equipment, which are currently subject to Rule 1147, for the inclusion in PAR 219 and adds numerous new definitions for the equipment that will be transitioned to the PAR 222 filing program:

- **Asphalt day tankers** [PAR 219 (m)(23)]
- **Asphalt pavement heaters** used for road maintenance and new road construction [PAR 219 (a)(5)]
- **Diesel fueled boilers**, 2,000,000 Btu per hour or less [PAR 219 (b)(2)]
- **Food ovens**, 2,000,000 Btu per hour or less [PAR 219 (b)(2)]
- **Fuel cells**, and associated heating equipment [PAR 219 (b)(5)]
- **Portable diesel fueled heaters**, 250,000 Btu per hour or less [PAR 219 (b)(3)]
- **Power pressure washers** and hot water steam washers and cleaners, 550,000 Btu per hour or less (b)(4)
- **Tar Pots** (aka Tar Kettles) (m)(11)

- ***Add additional sources of equipment, processes, and operations to the Rule 222 filing program in lieu of existing written permits***

The proposal also includes the following equipment and processes for the inclusion in PAR 219 and will be transitioned from the permitting program to the Rule 222 filing program:

- **Internal combustion engines** used exclusively for electrical generation at remote two-way radio transmission towers [PAR 219 (b)(1)]
- **Micro-turbines**, 3,500,000 Btu per hour or less [PAR 219 (b)(1)]
- **Storage of odorants for natural gas, propane, or oil** with a holding capacity of less than 950 liters (251 gallons) and associated transfer and control equipment [PAR 219 (m)(9)]

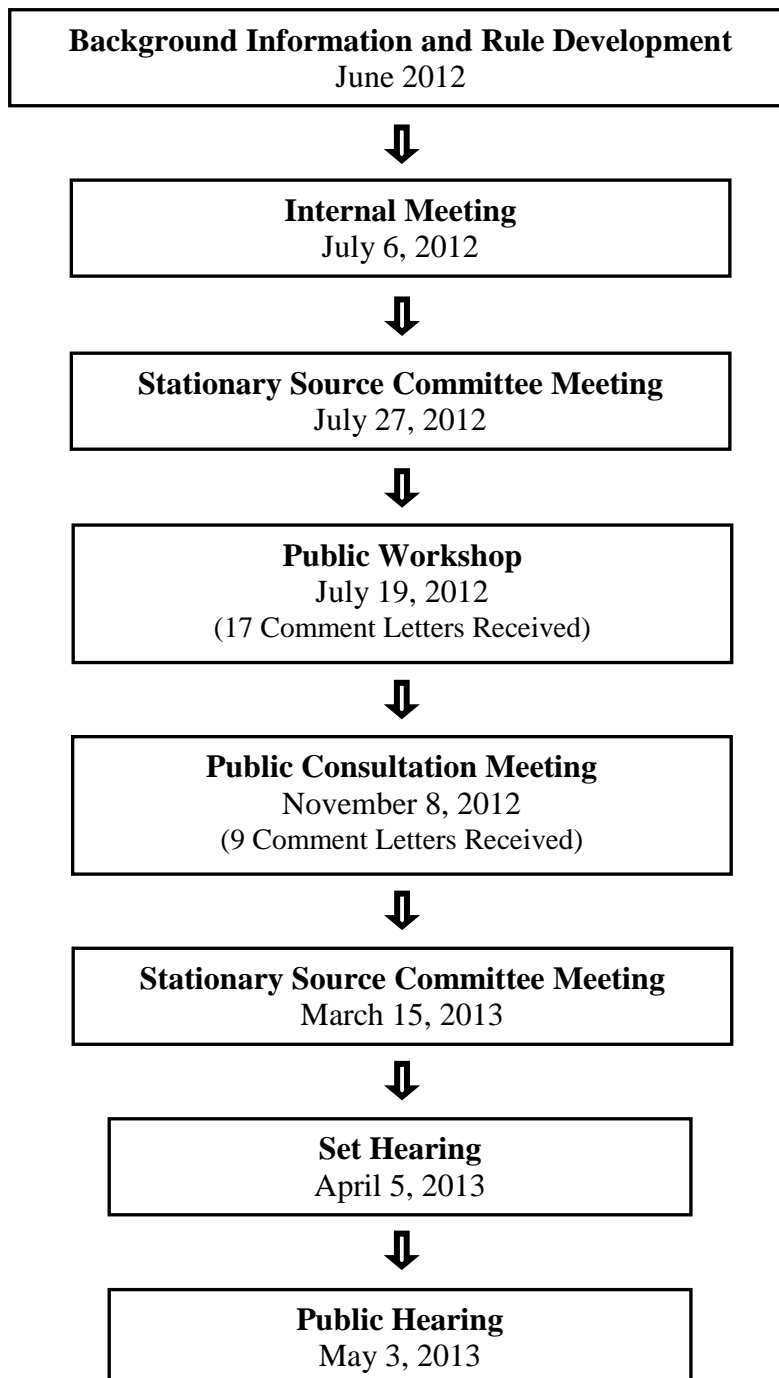
- ***Make minor revisions to some paragraphs of the current rule language and include clarifications and editorial corrections to enhance enforceability.***

ATTACHMENT B

RULE DEVELOPMENT PROCESS

**Proposed Amended Rule: 219 – Equipment Not Requiring a Written Permit
Pursuant To Regulation II, &**

**Proposed Amended Rule: 222 – Equipment Filing Requirements for Specific
Emission Sources Not Requiring a Written Permit
Pursuant To Regulation II**



Eleven (11) months spent in rule development

ATTACHMENT C

KEY CONTACTS LIST

**Proposed Amended Rule: 219 – Equipment Not Requiring a Written Permit
Pursuant To Regulation II, &**

**Proposed Amended Rule: 222 – Equipment Filing Requirements for Specific
Emission Sources Not Requiring a Written Permit
Pursuant To Regulation II**

GOVERNMENTAL AGENCIES

- California Air Resources Board
- City of Corona DWP
- Eastern Municipal Water District
- Inland Empire Water District
- Metropolitan Water District of So. Cal.
- LA County Sanitation Districts
- Orange County Sanitation District
- Southern California Gas/ SEMPRA

ASSOCIATIONS

- California Small Business Alliance
- Western States Petroleum Association, WSPA
- Radtech International

INDUSTRY/REGULATED COMMUNITIES/OTHER

- Alta Environmental
- Beta Offshore
- British Petroleum
- Cambro Manufacturing Co.
- Capstone Turbine Corporation
- Consolidated Precision Products
- Disneyland Resort
- Environmental Compliance Solutions
- ERM Group, Inc.
- Hydro Tek Systems, Inc.
- KarchernaMPE Services, Inc.
- Milan Ray Steube
- Oxbow Carbon, LLC
- Palm Springs Aerial Tramway
- PAMARCO Global Graphics
- Public Policy Advocates, LLC
- SCEC
- Waste Management
- Yorke Engineering, LLC

ATTACHMENT D
RESOLUTION NO 2013-_____

**Proposed Amended Rule: 219 – Equipment Not Requiring a Written Permit
Pursuant To Regulation II, &**

**Proposed Amended Rule: 222 – Equipment Filing Requirements for Specific
Emission Sources Not Requiring a Written Permit
Pursuant To Regulation II**

**A Resolution of the SCAQMD certifying the Notice of Preparation Of A Draft
Environmental Assessment for the proposed amendments to Rule 219 – Equipment Not
Requiring a Written Permit Pursuant to Regulation II and for the proposed amendments
to Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written
Permit Pursuant to Regulation II**

**A Resolution of the South Coast Air Quality Management District (SCAQMD)
Governing Board amending Rule 219 – Equipment Not Requiring a Written Permit
Pursuant to Regulation II and Rule 222 – Filing Requirements for Specific Emission
Sources Not Requiring a Written Permit Pursuant to Regulation II.**

WHEREAS, the SCAQMD Governing Board has determined with certainty that
Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to
Regulation II and Proposed Amended Rule 222 – Filing Requirements for Specific Emission
Sources Not Requiring a Written Permit Pursuant to Regulation II, is a “project” pursuant to the
California Environmental Quality Act (CEQA); and

WHEREAS, the SCAQMD has had its regulatory program certified pursuant to
Public Resources Code § 21080.5 and has conducted CEQA review and analysis pursuant to
such program (SCAQMD Rule 110); and

WHEREAS, SCAQMD staff has prepared a Draft Environmental Assessment
(EA) pursuant to its certified regulatory program and pursuant to CEQA Guidelines §15252,
setting forth the potential environmental consequences of Proposed Amended Rule 219 –
Equipment Not Requiring a Written Permit Pursuant to Regulation II and Proposed Amended
Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit
Pursuant to Regulation II; and

WHEREAS, the Draft EA was circulated for 45-day public review and comment
period from February 8, 2013 – March 26, 2013; and

WHEREAS, no comment letters were received relative to the analysis presented
in the Draft EA and the Draft EA has been revised such that it is now a Final EA; and

WHEREAS, it is necessary that the adequacy of the Final EA be determined by
the SCAQMD Governing Board prior to its certification; and

WHEREAS, it is necessary that the SCAQMD prepare Findings and a Statement of Overriding Considerations pursuant to CEQA Guidelines §15091 and §15093, respectively, regarding potentially significant adverse environmental impacts that cannot be mitigated to insignificance; and

WHEREAS, since no mitigation measures were identified to reduce or eliminate significant adverse operational air quality impacts to less than significant, a Mitigation Monitoring Plan pursuant to Public Resources Code §21081.6 was not required; and

WHEREAS, the SCAQMD Governing Board voting on Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II has reviewed and considered the Final EA prior to its certification; and

WHEREAS, the SCAQMD Governing Board finds and determines, taking into consideration the factors in § (d)(4)(D) of the Governing Board Procedures, that the modifications adopted, which have been made to Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II, since notice of public hearing was published do not significantly change the meaning of the proposed project within the meaning of Health and Safety Code § 40726 and would not constitute significant new information requiring recirculation of the Draft CEQA document pursuant to CEQA Guidelines §15088.5; and

WHEREAS, the SCAQMD governing board voting on Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II, has reviewed and considered for both Rule 219 and Rule 222, as adopted on May 3, 2013, and as revised by the Final EA to its certification; and

WHEREAS, the SCAQMD Governing Board has determined that the Socioeconomic Impact Assessment of Proposed Amended Rule 219 - Equipment Not Requiring a Written Permit Pursuant To Regulation II Proposed Amended and Rule 222 - Equipment Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant To Regulation II, are consistent with the Governing Board March 17, 1989 and October 14, 1994 resolutions and the provisions of the Health And Safety Code sections 40440.8, 40728.5 and 40920.6; and

WHEREAS, The SCAQMD Governing Board has determined that a need exists to adopt Proposed Amended Rule 219 - Equipment Not Requiring a Written Permit Pursuant To Regulation II Proposed Amended in order to exempt several types of equipment that has been evaluated and found to emit small amounts of air contaminants; The SCAQMD Governing Board has determined that a need exists to include new and clarified rule language for various types of equipment: and

WHEREAS, the SCAQMD Governing Board has determined that a need exists to amend Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit

Pursuant to Regulation II in order to incorporate several types of equipment that have been evaluated and found to emit small amounts of air contaminants as certain filing or registration requirements pursuant to SCAQMD Rule 219 - Equipment Not Requiring a Written Permit Pursuant To Regulation II Proposed Amended and CARB ATCM for Stationary Compression Ignition Engines; and

WHEREAS, Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II are not control measures in the 2007 Air Quality Management Plan (AQMP) and thus, was not ranked by cost-effectiveness relative to other AQMP control measures in the 2007 AQMP; and

WHEREAS, the SCAQMD Governing Board obtains its authority to adopt these proposed amended rules pursuant to sections 39002, 40000, 40001, 40440, 41508 and 41712 of the California Health and Safety Code; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II are written and displayed so that the meaning can be easily understood by persons directly affected by them; and

WHEREAS, the SCAQMD Governing Board has determined that Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II as proposed to be amended, are both in harmony with and not in conflict with or contradictory to, existing statutes, court decisions, or state or deferral regulations; and

WHEREAS, the SCAQMD Governing Board has determined that Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II as proposed to be adopted, do not impose the same requirements as any existing state or deferral regulation, and the proposed amended rules are necessary and proper to execute the powers and duties granted to, and imposed upon, the District; and

WHEREAS, the SCAQMD Governing Board has determined that Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II as proposed to be adopted, references the following statutes which the SCAQMD hereby implements, interprets or makes specific: Health and Safety Code section 40001(a) and (b) (air quality standards and air pollution episodes), section 40440 (adoption of rules and regulations), 40701 (rules regarding district's authority to collect information), section 40702 (adoption of rules and regulations), and section 40440 (rules and regulations to carry out the air quality management plan and to require regarding district's authority to collect information), 41508 (authority over non-vehicular sources), 41511 (rules for determination of emissions), 42300 et seq. (authority for permit system), and 42320 (rules implementing the Air Pollution Permit Streamlining Act of 1992); and 42301.16 (permit requirements for agricultural sources) and California Code of Regulations, Title 17, Sections 93115.3(a) and 93115.8(c); and

WHEREAS, a public hearing has been properly noticed in accordance with all provisions of Health and Safety Code Section 40725; and

WHEREAS, the SCAQMD Governing Board has held a public hearing in accordance with all provisions of law; and

WHEREAS, the SCAQMD Governing Board has held a public consultation meeting in accordance with all provisions of law; and

WHEREAS, the SCAQMD specifies the Manager of Area Sources for Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of these proposed amendments is based, which are located at the South Coast Air Quality Management District, 21965 Copley Drive, Diamond Bar, California, and;

WHEREAS, the SCAQMD Governing Board has determined the Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II, should be adopted for the reasons contained in the Final Staff Report, and

NOW, THEREFORE, BE IT RESOLVED, that the Governing Board does hereby certify that the Final EA for Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II, was completed in compliance with CEQA and Rule 110 provisions; and finds that the Final EA was presented to the Governing Board, whose members reviewed, considered and approved the information therein prior to acting on PARs 219 and 222; and

BE IT FURTHER RESOLVED, that the Governing Board adopts the Findings and Statement of Overriding Considerations pursuant to CEQA Guidelines §15091 and §15093, respectively, which are included as Attachment 1 to this Resolution and incorporated herein by reference; and

BE IT FURTHER RESOLVED, that the SCAQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II, as set forth in the attached, and incorporated herein by this reference.

DATE

CLERK OF THE BOARDS

ATTACHMENT 1

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Attachment 1 to the Governing Board Resolution for Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II

Findings and Statement of Overriding Considerations

May 2013

SCAQMD No. 121017JK

SCH No. 2012101060

Executive Officer

Barry R. Wallerstein, D.Env.

Deputy Executive Officer

Planning, Rule Development, and Area Sources

Elaine Chang, DrPH

Assistant Deputy Executive Officer

Planning, Rules, and Area Sources

Laki Tisopulos, Ph.D, P.E.

Planning and Rules Manager

Planning, Rule Development and Area Sources

Susan Nakamura

Author:	James Koizumi	Air Quality Specialist
Technical Assistance:	Don Hopps Wayne Barcikowski	Air Quality Specialist Air Quality Specialist
Reviewed By:	Steve Smith, Ph.D. Lauren Nevitt Barbara Baird	Program Supervisor, CEQA Deputy District Counsel II District Counsel

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

GOVERNING BOARD

CHAIRMAN: DR. WILLIAM A. BURKE
Speaker of the Assembly Appointee

VICE CHAIR: DENNIS R. YATES
Mayor, City of Chino
Cities of San Bernardino County

MEMBERS:

MICHAEL D. ANTONOVICH
Supervisor, Fifth District
Los Angeles County

BEN BENOIT
Councilmember, City of Wildomar
Cities of Riverside County

JOHN J. BENOIT
Supervisor, Fourth District
Riverside County

MICHAEL A. CACCIOTTI
Councilmember, City of South Pasadena
Cities of Los Angeles County, Eastern Region

JOSIE GONZALES
Supervisor, Fifth District
San Bernardino County

JOSEPH K. LYOU, Ph.D.
Governor's Appointee

JUDITH MITCHELL
Mayor Pro Tem, Rolling Hills Estates
Cities of Los Angeles County, Western Region

SHAWN NELSON
Supervisor, Fourth District
Orange County

DR. CLARK E. PARKER, SR.
Senate Rules Committee Appointee

JAN PERRY
Councilmember, Ninth District
City of Los Angeles Representative

MIGUEL A. PULIDO
Mayor, City of Santa Ana
Cities Representative, Orange County

EXECUTIVE OFFICER:
BARRY R. WALLERSTEIN, D.Env.

TABLE OF CONTENTS

INTRODUCTION.....	1
CERTIFICATION OF THE FINAL EA	1
ENVIRONMENTAL REVIEW PROCESS	1
SUMMARY OF THE PROPOSED PROJECT	2
ABSENCE OF NEW INFORMATION	3
DIFFERENCES OF OPINION REGARDING THE IMPACTS OF THE PROJECT.....	3
SIGNIFICANT ADVERSE IMPACTS WHICH CAN BE REDUCED BELOW A SIGNIFICANT LEVEL OR WERE CONCLUDED TO BE INSIGNIFICANT.....	4
SIGNIFICANT ADVERSE IMPACTS THAT CANNOT BE REDUCED BELOW A SIGNIFICANT LEVEL	4
FINDINGS	5
STATEMENT OF OVERRIDING CONSIDERATIONS	8
RECORD OF PROCEEDINGS.....	10
MITIGATION	10
CONCLUSION.....	10

INTRODUCTION

Proposed amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and Proposed amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II, are a “project” as defined by the California Environmental Quality Act (CEQA) (California Public Resources Code §§21000 et seq.). The South Coast Air Quality Management District (SCAQMD) is the lead agency for the proposed project and, therefore, has prepared an Environmental Assessment (EA) pursuant to CEQA Guidelines §15252 and SCAQMD Rule 110. Analysis of the proposed project indicated that a Draft EA (environmental impact report (EIR) equivalent document) would be the appropriate document to analyze the potentially significant adverse environmental impacts associated with PARs 219 and 222 because operational emissions foregone associated with implementing the proposed project would potentially exceed the SCAQMD's operational significance threshold for NOx.

The Draft EA was circulated to the public for a 45-day review and comment period from February 8, 2013, to March 26, 2013. No comment letters were received during the public comment period. The Draft EA has been revised such that it is now a Final EA.

CERTIFICATION OF THE FINAL EA

The SCAQMD Governing Board certifies that it has been presented with the Final EA for proposed amended rules (PARs) 219 and 222 and that it has reviewed and considered the information contained in the Final EA prior to making the following certifications and findings. Pursuant to CEQA Guidelines §15090 (Title 14 of the California Code of Regulations, §15090), the SCAQMD Governing Board certifies that the Final EA, including responses to comments, has been completed in compliance with the CEQA statutes and the CEQA Guidelines. The SCAQMD Governing Board certifies the Final EA for the actions described in these findings and in the Final EA, i.e., the proposed project. The SCAQMD Governing Board further certifies that the Final EA reflects its independent judgment and analysis. The Governing Board Resolution includes the certification of the Final EA.

ENVIRONMENTAL REVIEW PROCESS

To fulfill the purpose and intent of CEQA, the SCAQMD, as the lead agency for the proposed project, prepared and released a Notice of Preparation and Initial Study (NOP/IS), which is a preliminary evaluation of potentially significant adverse environmental impacts associated with the proposed project to be further analyzed in the Draft EA. The original NOP/IS was distributed to responsible agencies and interested parties for a 30-day review and comment period on October 17, 2012. The NOP/IS formed the basis for, and focus of, the technical analyses in the Draft EA.

The following environmental topic of air quality was identified in the October 17, 2012 NOP/IS as potentially significant and was further analyzed in the Draft EA. The October 17, 2012 NOP/IS concluded that there would be no significant adverse impacts on aesthetics, agricultural and forestry resources, biological resources, cultural resources, energy geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, solid and hazardous wastes, and

transportation and traffic. A copy of the August 2, 2012 NOP/IS can be found in Appendix A of the Final EA.

The October 17, circulated to local jurisdictions and public agencies, 2012 AQMP stakeholders, and interested individuals in order to solicit input on the scope of the environmental analysis to be included in the Draft EA. No comment letters were received relative to the October 17, 2012 NOP/IS.

The Draft EA was released for a 45-day public review and comment period from February 5, 2013 through March 26, 2013. As with the October 17, 2012 NOP/IS, the Draft EA was circulated for public review and comment to local jurisdictions and public agencies, Rule 219 and Rule 222 stakeholders, and interested individuals. The environmental topic of air quality was determined to have potentially significant impacts and was further analyzed in the Draft EA.

NO comment letters were received during the public comment period on the Draft EA. Because PARs 219 and 222 have the potential to generate significant adverse environmental impacts that cannot be mitigated to less than significance, Findings and a Statement of Overriding Considerations are required and have been prepared pursuant to CEQA Guidelines §15091 and §15093, respectively.

The Final EA consists of an executive summary, project description, environmental setting, environmental impacts (no mitigation measures were identified to reduce air quality impacts to less than significant), cumulative impacts, project alternatives, copies of PARs 219 and 222 (Appendix A of the Final EA), the October 17, 2012 NOP/IS (Appendix B of the Final EA), assumptions and calculations (Appendix C of the Final EA), and responses to comments on the Draft EA (Appendix D of the Final EA). All documents comprising the Final EA for the proposed project are available at SCAQMD headquarters, 21865 Copley Drive, Diamond Bar, California, 91765. The Final EA was made available to the public on April 26, 2013, and can be obtained by contacting the SCAQMD's Public Information Center at (909) 396-2039 or by accessing the SCAQMD's CEQA webpage at: <http://www.aqmd.gov/ceqa/aqmd.html>.

SUMMARY OF THE PROPOSED PROJECT

Rule 219 provides an exemption to a written permit or filing requirements for specified equipment, processes, or operations that emit small amounts of air pollutants. Rule 219 sources are not issued operating conditions from the SCAQMD. Rule 222 provides access to a simple and efficient filing system for certain low-emitting emission sources. Rule 222 sources are subject to written operating conditions. SCAQMD staff is proposing to add some types of equipment to Rule 219 (to exempt them from permit requirements) and Rule 222 (to track equipment by imposing filing requirements). Equipment added to both proposed amended Rules (PARs) 219 and 222 includes, but is not limited to, the following types of equipment currently regulated by Rule 1147 (pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, diesel boilers) and Rule 1110.2 (piston-type internal combustion engines located at remote two-way radio transmission towers). Such equipment would no longer be regulated by Rules 1110.2 or 1147; but may be subject to operating conditions. Sources that would be added to PAR 219, but not PAR 222, include, but are not limited to, air pollution control devices for Rule 219 equipment; cosmetic filling stations and related filling equipment; laser cutting, etching and engraving equipment; and aerosol can recycling systems. Text would

also be added to PAR 219 and PAR 222 to clarify the intent of existing provisions and the enforceability of the conditions imposed by PAR 222. .

ABSENCE OF NEW INFORMATION

CEQA Guidelines §15088.5 requires a lead agency to recirculate a CEQA document for further review and comment when significant new information is added to the document after public notice is given of the availability of the draft CEQA document, but before certification of a final CEQA document. New information added to the CEQA document is not “significant” unless the CEQA document is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project proponent declines to implement. The CEQA Guidelines provide examples of significant new information under this standard. Recirculation is not required where the new information added to the CEQA document merely clarifies or amplifies or makes insignificant modifications in an adequate CEQA document.

Updated Information: The SCAQMD Governing Board recognizes that the Final EA incorporates information obtained by SCAQMD since the Draft EA was completed, and contains minor additions and clarifications. The SCAQMD Governing Board finds further that these changes to EA for the proposed project are in accordance to requests by responsible agencies or other entities to comply with their regulatory requirements and processes, but do not cause any new or more severe environmental impacts. Therefore, in accordance with the CEQA statutes and Guidelines, no recirculation of the Final EA is necessary based on the changes to PARs 219 or the Final EA.

Responses to Comments: No comments were received on the Draft EA.

DIFFERENCES OF OPINION REGARDING THE IMPACTS OF THE PROJECT

In making its determination to certify the Final EA and to approve the proposed project, the SCAQMD Governing Board recognizes that the proposed project may involve a number of controversial environmental issues and that a range of opinion may exist with respect to those issues. The SCAQMD Governing Board has acquired an understanding of the range of opinion by its review of the Draft EA. Additionally, the SCAQMD Governing Board has its own experience and expertise in assessing air quality effects and in administering its regulatory programs. The SCAQMD Governing Board has reviewed and considered, as a whole, the evidence and analysis presented in the Draft EA, the analysis presented in the comments on the Draft EA, the analysis presented in the Final EA, and the expert opinions of SCAQMD staff addressing those comments. The SCAQMD Governing Board has gained a comprehensive and well-rounded understanding of the environmental issues presented by the proposed project. In turn, this understanding has enabled the SCAQMD Governing Board to make its decisions after weighing and considering the various viewpoints on these important issues. The SCAQMD Governing Board accordingly certifies that its findings are based on full appraisal of all of the information contained in the Final EA, as well as the evidence and other information in the record.

SIGNIFICANT ADVERSE IMPACTS WHICH CAN BE REDUCED BELOW A SIGNIFICANT LEVEL OR WERE CONCLUDED TO BE INSIGNIFICANT

The Final EA identified air quality as an area that may be adversely affected by the proposed project, specifically, operational emissions foregone associated with implementing the proposed project would potentially exceed the SCAQMD's operational significance threshold for NO_x. The proposed project was evaluated according to the CEQA environmental checklist (CEQA Guidelines, Appendix G), which includes approximately 17 environmental topics for potential adverse impacts from a proposed project. The screening analysis concluded that the following environmental areas would not be significantly adversely affected by the proposed project:

- | | |
|-----------------------------------|--------------------------------------|
| • Aesthetics | • agriculture and forestry resources |
| • biological resources | • cultural resources |
| • energy | • geology and soils |
| • hazards and hazardous materials | • hydrology and water quality |
| • land use and planning | • mineral resources |
| • noise | • population and housing |
| • public services | • recreation |
| • solid/hazardous waste | • transportation/traffic |

SIGNIFICANT ADVERSE IMPACTS THAT CANNOT BE REDUCED BELOW A SIGNIFICANT LEVEL

Project-specific Criteria Operational Air Quality Impacts

Adverse operational air quality impacts would result from both NO_x emission reductions foregone. The proposed project could cause significant adverse environmental impacts to operational air quality emissions from NO_x emission reductions foregone. Specifically, analysis of these environmental impacts revealed that potentially significant operational air quality impacts may result from exempting PARs 219 and 222 equipment from requirements under Rule 1110.2 and Rule 1147. Implementing PARs 219 and 222 means that the NO_x concentration limits for affected Rule 1110.2 and Rule 1147 equipment would no longer be required. Because NO_x concentration limits required by Rule 1110.2 and Rule 1147 would no longer apply, no additional physical changes requiring construction would be required for PARs 219 and 222 equipment under the proposed project.

PARs 219 and 222 would result in 139 pounds of NO_x emission reductions foregone. NO_x emissions reductions foregone are not direct NO_x emissions, but the loss of expected emission reductions. For this analysis, to be conservative, NO_x emission reductions foregone are treated as NO_x emissions and compared to the operational air quality NO_x significance threshold. The amount of NO_x emission reductions foregone is expected to exceed the operational air quality NO_x significance threshold of 55 pounds per day. For these reasons, operational air quality impacts associated with implementation of PARs 219 and 222 are potentially significant. No other criteria pollutants were shown to exceed the applicable air quality significance thresholds.

Cumulative Air Quality Impacts During Operation

Cumulative air quality impacts from the proposed project and all other AQMP control measures considered together are not expected to be significant because the amount of NO_x emission reductions to be achieved by the AQMP are expected to meet the emission reduction projections and commitments made by control measures in the 2012 AQMP¹. The reason for this conclusion is that, overall, both Rules 1147 and 1110.2 are expected to result in net NO_x emission reductions from affected equipment. Thus, despite the NO_x emission reductions foregone, cumulative air quality impacts are not expected.

Thus, in consideration of the total net accumulated emission reductions projected overall, the loss of NO_x emission reductions would not interfere with the air quality progress and attainment demonstration projected in the AQMP. Indeed, the 2012 AQMP indicated that, based on future anticipated overall reduction in emissions, the Basin would demonstrate attainment with the federal eight-hour ozone ambient air quality standard in 2023 for the 88 parts per billion concentration standard and demonstrate attainment with the federal 24-hour PM_{2.5} 35 microgram per meter cubed concentration standard in 2014 (SCAQMD, 2012). Therefore, cumulative air quality impacts from the proposed project and all other AQMP control measures, when considered together, are not expected to be significant because implementation of all AQMP control measures is expected to result in net emission reductions and overall air quality improvement.

FINDINGS

Public Resources Code §21081 and CEQA Guidelines §15091(a) state that no public agency shall approve or carry out a project for which a CEQA document has been completed which identifies one or more significant adverse environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. Additionally, the findings must be supported by substantial evidence in the record (CEQA Guidelines §15091(b)). As identified in the Final EA and summarized above, the proposed project has the potential to create significant adverse NO_x air quality impacts.

This attachment provides the written analysis and conclusions of the SCAQMD Governing Board regarding the environmental impacts of the proposed project (no mitigation measures were identified) proposed in the Final EA and adopted by the decision-making body. In making these findings, the SCAQMD Governing Board has considered the opinions of other members of the public, including opinions that disagree with some of the analysis in the Final EA. The SCAQMD Governing Board finds that the appropriate methodology for calculating effects and determining significance is a judgment within the discretion of the decision-making body; the method of analysis used in the Final EA is supported by substantial evidence in the record, including the expert opinions of the SCAQMD staff; and the significance thresholds used in the Final EA provide reasonable and appropriate means of assessing the significance of the adverse environmental effects of the proposed project.

¹ SCAQMD, 2012 AQMP, <http://www.aqmd.gov/aqmp/2012aqmp/index.htm>.

In making these findings, the SCAQMD Governing Board ratifies, adopts, and incorporates the analysis and explanation in the Final EA, and ratifies, adopts, and incorporates in these findings the determinations and conclusions of the Final EA relating to environmental impacts, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings. Findings need not be made for environmental impacts that are not significant. The SCAQMD Governing Board, therefore, makes the following findings regarding the proposed project. The findings are supported by substantial evidence in the record as explained in each finding. The Findings will be included in the record of project approval and will also be noted in the Notice of Decision.

1. Potential air quality adverse impacts cannot be mitigated to insignificance.

Finding and Explanation: Equipment currently subject to Rule 1147 that would be added to Rules 219 and 222 are small NO_x emitting equipment. Retrofitting this equipment with low NO_x burners presents a compliance challenge because of the lack of availability of low NO_x burners for all types of equipment. The only other compliance option for these small pieces of equipment would be to replace the equipment with clean fuel equipment, which is costly. As noted in the EA, the intent of Rule 1147 is a retrofit rule not an equipment replacement rule. Similarly, retrofitting affected Rule 1110.2 equipment is costly and because the equipment is located in remote locations at high elevations, switching to natural gas is untenable because no natural gas pipelines extend to these locations. Further, switching from diesel fuel to other clean fuels is not possible because alternative fuels would have to be trucked to the equipment, which may not be possible during winter inclement weather conditions. For these reasons, there are no feasible mitigation measures that would reduce or eliminate the expected NO_x emission reductions foregone pursuant to the original rules' compliance schedules. Consequently, the operational air quality impacts from the proposed project cannot be mitigated to less than significant.

2. Feasible Alternatives to the Proposed Project do not reduce adverse air quality impacts to insignificance.

The Final EA includes an evaluation of three potential alternatives to the proposed project, which includes a no project alternative. The Final EA examines the environmental impacts of each alternative in comparison with the proposed project and the relative ability of each alternative to satisfy the project objectives. The Final EA also summarizes the criteria used to identify a range of reasonable alternatives for review and describes proposals that SCAQMD concluded did not merit additional, more-detailed review either because they did not present viable alternatives to the proposed project or they are variations on the alternatives that are evaluated in detail.

In making these findings, the SCAQMD Governing Board certifies that it has independently reviewed and considered the information on alternatives provided in the Final EA. The Final

EA's discussion and analysis of these alternatives is not repeated in these findings, but the discussion and analysis of the alternatives in the Final EA is incorporated in these findings by reference.

Description of Project Objectives

CEQA Guidelines §15124 (b) requires an EIR to include a statement of objectives, which describes the underlying purpose of the proposed project. The purpose of the statement of objectives is to aid the lead agency in identifying alternatives and the decision-makers in preparing findings and a statement of overriding considerations, if necessary. The objectives of PARs 219 and 222 are summarized in the following points.

1. Provide regulatory relief to operators of small NOx emitting equipment that would otherwise be subject to the NOx emission control requirements of Rule 1147 because no feasible retrofit NOx emission control equipment is currently available for these categories of equipment, so the only compliance option would be limited to equipment replacement. Equipment replacement is inconsistent with the intent of Rule 1147, which was promulgated as an equipment retrofit rule not an equipment replacement rule.
2. Provide regulatory relief to operators of piston-type internal combustion engines used exclusively to generate electricity for remote two-way radio transmission towers and that meet the definition of this type of equipment in PAR 219 and PAR 222, that would otherwise be subject to Rule 1110.2, For the following reasons:
 - a. This type of equipment is located in remote locations typically at high elevations and diesel fuel is the only type of fuel that can last for sufficiently long periods of time in the event of inclement weather compared to other types of fuel; therefore, compliance options such as electricity (electricity lines are not typically available in remote areas) or fuels other than diesel fuel are not feasible; and
 - b. Maintenance and operation of air pollution control technologies and associated monitoring systems may not be possible during inclement weather at these remote stations.
3. Public safety requires consistent operation of piston-type internal combustion engines used exclusively to generate electricity for remote two-way radio transmission towers; therefore, because of the issues identified in #2 above, exempting this equipment from the requirements of Rule 1110.2 would ensure that two-way radio transmission towers would be available during emergencies.
4. Provide administrative relief for low-emitting equipment by not requiring a written permit pursuant to Rule 219, because the low emissions from affected equipment would not justify the administrative cost of processing and issuing written permits.
5. Provide administrative relief for low-emitting equipment by requiring simplified filing pursuant to Rule 222, because the low emissions from affected equipment would not justify the administrative costs of processing and issuing written permits for these types of equipment, which are substantially greater than Rule 222 filing fees.

Finding and Explanation: The Final EA describes and evaluates three alternatives to the proposed project. The SCAQMD Governing Board finds that the proposed project would best satisfy all of the project objectives. The SCAQMD Governing Board finds that the alternatives

are unable to satisfy the project objectives to the same degree as the proposed project. The SCAQMD Governing Board further finds that, on balance, none of the alternatives has environmental advantages over the proposed project that are sufficiently great to justify approval of such an alternative instead of PARs 219 and 222, in light of each such alternative's inability to satisfy the proposed project objectives to the same degree as the proposed project. Accordingly, the SCAQMD Governing Board has determined to approve the proposed project instead of approving any of the alternatives.

In making this determination, the SCAQMD Governing Board finds that when compared to the alternatives described and evaluated in the Final EA, the proposed project provides a reasonable balance between fully satisfying the project objectives and reducing potential environmental impacts to an acceptable level. The SCAQMD Governing Board further finds and determines that the proposed project should be approved, rather than one of the other alternatives.

Potential adverse environmental impacts from three project alternatives were analyzed and their relative merits were compared to PARs 219 and 222. Alternatives evaluated in the Final EA for the proposed project include: Alternative A – No Project Alternative, Alternative B – Reduction in size, and Alternative C – Excluded Equipment. Although the project alternatives would reduce significant adverse operational NOx air quality impacts to less than significant they would not attain most of the basic project objectives set forth above compared to the proposed project.

Summary of Findings Regarding Alternatives: The SCAQMD Governing Board finds that the range of alternatives evaluated in the Final EA reflects a reasonable attempt to identify and evaluate various types of alternatives that would potentially be capable of reducing the proposed project's environmental effects, while accomplishing most, but not all of the project objectives. The SCAQMD Governing Board finds that the alternatives analysis is sufficient to inform the SCAQMD Governing Board and the public regarding the tradeoffs between the degree to which alternatives to the proposed project could reduce environmental impacts and the corresponding degree to which the alternatives would hinder the SCAQMD's ability to achieve the project objectives.

The SCAQMD Governing Board finds further that the proposed project achieves the best balance between the adverse air quality impacts while meeting the objectives of the project, which is to provide regulatory relief for affected engines when necessary, while still providing health protective benefits for sensitive receptors where feasible. All of the findings presented in these "Findings" are supported by substantial evidence in the record.

STATEMENT OF OVERRIDING CONSIDERATIONS

If significant adverse impacts of a proposed project remain after incorporating mitigation measures or no measures or alternatives to mitigate the adverse impacts to less than significant levels are identified, the lead agency must make a determination that the benefits of the project outweigh the unavoidable adverse environmental effects if it is to approve the project. CEQA

requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the project (CEQA Guidelines §15093(a)). If the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable” (CEQA Guidelines §15093(a)). This statement of overriding considerations is based on the decision-making body’s review of the Final EA, responses to comments, and other information in the administrative record. Each of the benefits identified below provides a separate and independent basis for overriding the significant adverse environmental effects of the 2012 AQMP. Accordingly, a Statement of Overriding Considerations regarding potentially significant adverse impacts resulting from the proposed project has been prepared. This Statement of Overriding Considerations is included as part of the record of the project approval for the proposed project. Pursuant to CEQA Guidelines §15093(c), the Statement of Overriding Considerations will also be noted in the Notice of Decision for the proposed project.

Despite the inability to incorporate changes into the project that will mitigate potentially significant adverse impacts to a level of insignificance, the SCAQMD's Governing Board finds that the following benefits and considerations outweigh the significant unavoidable adverse environmental impacts:

1. The analysis of potential adverse environmental impacts incorporates a “worst-case” approach. This entails the premise that whenever the analysis requires that assumptions be made, those assumptions that result in the greatest adverse impacts are typically chosen. This method likely overestimates the actual adverse air quality impacts resulting from the proposed project.
2. The proposed project is expected to provide regulatory and financial relief to operators of small NO_x emitting equipment because it relieves them of the obligation to replace existing equipment as no feasible retrofit NO_x emission control equipment is currently available for these categories of equipment.
3. Because the proposed project would relieve affected operators of small NO_x emitting equipment from replacing existing equipment that would otherwise be subject to the emission control requirements of Rule 1147, it is consistent with the intent of Rule 1147, which was promulgated as an equipment retrofit rule not an equipment replacement rule.

The proposed project is expected to provide regulatory and financial relief to operators of piston-type internal combustion engines used exclusively to generate electricity for remote two-way radio transmission towers and that meet the definition of this type of equipment in PAR 219 and PAR 222, that would otherwise be subject to Rule 1110.2, because there are no compliance options that would guarantee that the affected equipment could continue to operate during inclement weather, especially during snowy winter conditions, when engines cannot be fueled using non-diesel fuels or control equipment cannot receive proper maintenance.

4. Remotely located two-way radio transmission towers that rely on piston-type internal combustion engines used exclusively to generate electricity provide a public safety service by providing communication to remote locations. Therefore, exempting this equipment from the requirements of Rule 1110.2 would ensure that two-way radio transmission towers would continue to provide a public safety service by being available at all times to provide communication to remote locations, especially during emergencies.
5. Provide administrative and financial relief to operators of low-emitting equipment by not requiring a written permit pursuant to Rule 219, because the low emissions from affected equipment would not justify the administrative cost of processing and issuing written permits.
6. Provide administrative and financial relief to operators of low-emitting equipment by requiring simplified filing pursuant to Rule 222, because the low emissions from affected equipment would not justify the administrative costs of processing and issuing written permits for these types of equipment, which are substantially greater than Rule 222 filing fees

The SCAQMD's Governing Board finds that the above-described considerations outweigh the unavoidable significant effects to the environment as a result of the proposed project.

RECORD OF PROCEEDINGS

Upon certification, the record of approval for this proposed project, i.e., the Notice of Decision will be posted and recorded by the Secretary of the Resources Agency. The record of approval for the proposed project and all documents and other materials related to this proposed project may be found at SCAQMD Headquarters, 21865 Copley Drive, Diamond Bar, California, 91765. The Custodian of the Record is the Deputy Executive Officer of Planning, Rules and Area Sources.

MITIGATION

CEQA requires an agency to prepare a plan for reporting and monitoring compliance with the implementation of measures to mitigate significant adverse environmental impacts. Mitigation monitoring requirements are included in CEQA Guidelines §15097 and Public Resources Code §21081.6, which specifically state:

When making findings as required by subdivision (a) of Public Resources Code §21081 or when adopting a negative declaration pursuant to paragraph (2) of subdivision (c) of Public Resources Code §21080, the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment (Public Resources Code §21081.6). The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of an agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead or responsible agency, prepare and submit a proposed reporting or monitoring program.

The provisions of CEQA Guidelines §15097 and Public Resources Code §21081.6 are triggered when the lead agency certifies a CEQA document in which mitigation measures, changes, or

alterations have been required or incorporated into the project to avoid or lessen the significance of adverse impacts identified in the CEQA document. However, since no mitigation measures to reduce significant adverse operational NOx air quality impacts were identified a mitigation monitoring and reporting plan for operations is not required.

CONCLUSION

Based on a “worst-case” analysis, the potential adverse NOx air quality impacts from operational NOx emission reductions foregone as a result of adopting and implementing of PARs 219 and 222 are considered significant and unavoidable. PARs 219 and 222 would result in 139 pounds of NOx emission reductions foregone per day, which exceeds the SCAQMD operational NOx significant threshold of 55 pounds per day. Since the NOx emission reductions foregone would exceed the applicable NOx significance threshold, NOx is an ozone precursor, and the district is classified as non-attainment for ozone; PARs 219 and 222 may contribute to an existing or projected air quality violation. Since the proposed project would result in NOx emissions reductions foregone from the existing Rules 1147 and 1110.2 that exceed the operational NOx significant threshold of 55 pounds per day, it may diminish an existing air quality rule or future compliance requirement resulting in a significant increase in an air pollutant. No feasible mitigation measures or project alternatives have been identified that would further reduce air quality impacts to less than significant levels, while still achieving the overall objectives of the project.

It should be noted, however, that the air quality analysis is a conservative, "worst-case" analysis so the actual operation impacts may not be as great as estimated here.

ATTACHMENT E

PROPOSED AMENDED RULE 219 EQUIPMENT NOT REQUIRING A WRITTEN PERMIT PURSUANT TO REGULATION II

INDEX OF EXEMPTION CATEGORIES

	<u>PAGE</u>
(a) Mobile Equipment	<u>1</u>
(b) Combustion and Heat Transfer Equipment	<u>1</u>
(c) Structures and Equipment — General	<u>23</u>
(d) Utility Equipment – General	<u>34</u>
(e) Glass, Ceramic, Metallurgical Processing and Fabrication Equipment	<u>45</u>
(f) Abrasive Blasting Equipment	<u>67</u>
(g) Machining Equipment	<u>78</u>
(h) Printing and Reproduction Equipment	<u>78</u>
(i) Pharmaceuticals, Cosmetics and Food Processing and Preparation Equipment	<u>910</u>
(j) Plastics, Composite and Rubber Processing Equipment	<u>1011</u>
(k) Mixing, Blending and Packaging Equipment	<u>1113</u>
(l) Coating and Adhesive Process/Equipment	<u>1214</u>
(m) Storage and Transfer Equipment	<u>1517</u>
(n) Natural Gas and Crude Oil Production Equipment	<u>1720</u>
(o) Cleaning	<u>1921</u>
(p) Miscellaneous Process Equipment	<u>2022</u>
(q) Agricultural Sources	<u>2225</u>
(r) Registered Equipment and Filing Program	<u>2326</u>
(s) Exceptions	<u>2426</u>
(t) Recordkeeping	<u>2527</u>
(u) Compliance Date	<u>2528</u>

(Adopted Jan. 9, 1976)(Amended Oct. 8, 1976)(Amended February 2, 1979)
(Amended Oct. 5, 1979)(Amended Sept. 4, 1981)(Amended June 3, 1988)
(Amended September 11, 1992)(Amended August 12, 1994)
(Amended December 13, 1996)(Amended September 11, 1998)
(Amended August 13, 1999)(Amended May 19, 2000)
(Amended November 17, 2000)(Amended July 11, 2003)
(Amended December 3, 2004)(Amended May 5, 2006)(Amended July 14, 2006)
(Amended June 1, 2007)(Proposed Amended Rule 219 May 2013)

**PROPOSED AMENDED RULE 219 - EQUIPMENT NOT REQUIRING A
WRITTEN PERMIT PURSUANT TO REGULATION II**

Purpose

The purpose of this rule is to identify equipment, processes, or operations that emit small amounts of air contaminants that shall not require written permits, unless such equipment, process or operation is subject to subdivision (s) – Exceptions. In addition, exemption from written permit requirements in this rule is only applicable if the equipment, process, or operation is in compliance with subdivision (t).

Written permits are not required for:

(a) Mobile Equipment

- (1) motor vehicle or vehicle as defined by the California Vehicle Code; or
- (2) marine vessel as defined by Health and Safety Code Section 39037.1; or
- (3) a motor vehicle or a marine vessel that uses one internal combustion engine to propel the motor vehicle or marine vessel and operate other equipment mounted on the motor vehicle or marine vessel; or
- (4) equipment which is mounted on a vehicle, motor vehicle or marine vessel if such equipment does not emit air contaminants;
- (5) asphalt pavement heaters (which are any mobile equipment used for the purposes of road maintenance and new road construction) provided a filing pursuant to Rule 222 is submitted to the Executive Officer.

This subdivision does not apply to air contaminant emitting equipment which is mounted and operated on motor vehicles, marine vessels, mobile hazardous material treatment systems, mobile day tankers [except those carrying solely fuel oil with an organic vapor pressure of 5 mm Hg (0.1 psi) absolute or less at 21.1 °C (70 °F)], ~~or pavement heating machines.~~

(b) Combustion and Heat Transfer Equipment

- (1) ~~Piston type internal~~ Internal combustion engines with a manufacturer's rating of 50 brake horsepower or less; or internal combustion engines, used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a 1/2 mile radius, with a manufacturer's rating of 100 brake horsepower or less and are fired exclusively on diesel #2 fuel; or stationary gas turbine engines, including micro-turbines, with a rated maximum heat input rate capacity of 2,975,000-3,500,000 British thermal units (Btu) per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation manufacture with the state of California or were in operation prior to May 3, 2013 provided a filing pursuant to Rule 222 is submitted to the Executive Officer.
- (2) Boilers, process heaters, or any combustion equipment that has a rated maximum heat input ~~rate capacity~~ of 2,000,000 Btu per hour (gross) or less and ~~is~~ are equipped to be heated exclusively with, natural gas, methanol, liquefied petroleum gas, or any combination thereof; or diesel fueled boilers, that have a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fueled exclusively with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland, and where the maximum NOx emission output of the equipment is less than one pound per day and uses less than 50 gallons of fuel per day, and have been in operation prior to May 3, 2013 provided a filing pursuant to Rule 222 is submitted to the Executive Officer. This exemption does not include apply to piston type internal combustion engines or turbines. This exemption does not apply whenever there are emissions other than products of combustion, unless the equipment is specifically exempt under another section of this rule, except for food ovens with a rated maximum heat input capacity of 2,000,000 Btu/hour or less, that are fired exclusively on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day provided a filing pursuant to Rule 222 is submitted to the Executive Officer.
- (3) Portable diesel fueled heaters, with a rated maximum heat input capacity of 250,000 Btu per hour or less, and that are equipped with burner(s)

designed to fire exclusively on diesel fuel only provided a filing pursuant to Rule 222 is submitted to the Executive Officer.

- (4) Power pressure washers and hot water or steam washers and cleaners, that are equipped with a heater or burner that is designed to be fired on diesel fuel, has a rated maximum heat input capacity of 550,000 Btu per hour or less, is equipped with non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day and uses no more than 50 gallons of fuel per day provided a filing pursuant to Rule 222 is submitted to the Executive Officer. This exemption does not apply to internal combustion engines or turbines.
- (35) Fuel cells, which produce electricity in an electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies; and associated heating equipment, including heaters that have a rated maximum heat input capacity of greater than 2,000,000 Btu per hour, provided that the supplemental heat used is 90,000 therms per year or less and provided a filing pursuant to Rule 222 is submitted to the Executive Officer.
- (46) Test cells and test stands used for testing burners or internal combustion engines provided that the equipment uses less than 800 gallons of diesel fuel and 3,500 gallons of gasoline fuel per year, or uses other fuels with equivalent or less emissions.
- (57) Internal combustion engines used exclusively for training at educational institutions.
- (68) Portable internal combustion engines, including any turbines qualified as military tactical support equipment under Health and Safety Code Section 41754, registered pursuant to the California Statewide Portable Engine Registration Program.

(c) Structures and Equipment - General

- (1) Structural changes which cannot change the quality, nature or quantity of air contaminant emissions.
- (2) Repairs or maintenance not involving structural changes to any equipment for which a permit has been granted.
- (3) Identical replacement in whole or in part of any equipment where a permit to operate had previously been granted for such equipment under Rule 203, except seals for external or internal floating roof storage tanks.

- (4) Replacement of floating roof tank seals provided that the replacement seal is of a type and model which the Executive Officer has determined is capable of complying with the requirements of Rule 463.
 - (5) Equipment utilized exclusively in connection with any structure which is designed for and used exclusively as a dwelling for not more than four families, and where such equipment is used by the owner or occupant of such a dwelling.
 - (6) Laboratory testing and quality control testing equipment used exclusively for chemical and physical analysis, non-production bench scale research equipment, and control equipment exclusively venting such equipment. Laboratory testing equipment does not include engine test stands or test cells unless such equipment is also exempt pursuant to paragraph (b)(4).
 - (7) Vacuum-producing devices used in laboratory operations or in connection with other equipment not requiring a written permit.
 - (8) Vacuum-cleaning systems used exclusively for industrial, commercial, or residential housekeeping purposes.
 - (9) Hoods, stacks, or ventilators.
 - (10) Passive and intermittently operated active venting systems used at and around residential structures to prevent the accumulation of naturally occurring methane and associated gases in enclosed spaces.
- (d) Utility Equipment - General
- (1) Comfort air conditioning or ventilating systems which are not designed or used to remove air contaminants generated by, or released from, specific equipment units, provided such systems are exempt pursuant to paragraph (b)(2).
 - (2) Refrigeration units except those used as or in conjunction with air pollution control equipment.
 - (3) Water cooling towers and water cooling ponds not used for evaporative cooling of process water or not used for evaporative cooling of water from barometric jets or from barometric condensers and in which no chromium compounds are contained.
 - (4) Equipment used exclusively to generate ozone and associated ozone destruction equipment for the treatment of cooling tower water or for water treatment processes.

- (5) Equipment used exclusively for steam cleaning provided such equipment is also exempt pursuant to paragraph (b)(2).
 - (6) Equipment used exclusively for space heating provided such equipment is exempt pursuant to paragraph (b)(2).
 - (7) Equipment used exclusively to compress or hold purchased quality natural gas, except internal combustion engines not exempted pursuant to paragraph (b)(1).
 - (8) Emergency ventilation systems used exclusively to scrub ammonia from refrigeration systems during process upsets or equipment breakdowns.
 - (9) Emergency ventilation systems used exclusively to contain and control emissions resulting from the failure of a compressed gas storage system.
 - (10) Passive carbon adsorbers, with a maximum vessel capacity of no more than 120 gallons, using now without mechanical ventilation ~~with a volume of 55 gallons or less, and~~ used exclusively for ~~foul air~~ odor control ~~from at wastewater treatment plants or sanitary sewer collection~~ systems, including such as sanitary sewer lines, manholes, and pump stations.
 - (11) Refrigerant recovery and/or recycling units. This exemption does not include refrigerant reclaiming facilities.
 - (12) Carbon arc lighting equipment, provided such equipment is exempt pursuant to paragraph (b)(1).
- (e) Glass, Ceramic, Metallurgical Processing, and Fabrication Equipment
- (1) Crucible-type or pot-type furnaces with a brimful capacity of less than 7400 cubic centimeters (452 cubic inches) of any molten metal and control equipment exclusively venting the equipment.
 - (2) Crucible furnaces, pot furnaces, or induction furnaces with a capacity of 450 kilograms (992 pounds) or less each, and control equipment used to exclusively vent the equipment where no sweating or distilling is conducted and where only the following materials are poured or held in a molten state ~~and control equipment exclusively venting the equipment~~:
 - (A) Aluminum or any alloy containing over 50 percent aluminum,
 - (B) Magnesium or any alloy containing over 50 percent magnesium,
 - (C) Tin or any alloy containing over 50 percent tin,
 - (D) Zinc or any alloy containing over 50 percent zinc,
 - (E) Copper or any alloy containing over 50 percent copper,
 - (F) Precious metals, and

(G) Glass Ceramic materials, including glass and porcelain.

Provided these materials do not contain alloying elements of arsenic, beryllium, cadmium, chromium and/or lead and such furnaces are exempt pursuant to paragraph (b)(2).

- (3) Molds used for the casting of metals and control equipment used to exclusively venting the equipment.
- (4) Inspection equipment used exclusively for metal, plastic, glass, or ceramic products and control equipment used to venting exclusively vent such equipment.
- (5) Ovens used exclusively for curing potting materials or castings made with epoxy resins, provided such ovens are exempt pursuant to paragraph (b)(2).
- (6) Hand-held or automatic brazing and soldering equipment, and control equipment that exclusively vents such equipment, provided that the equipment uses one quart per day or less or 22 quarts per calendar month or less of material containing VOC. This exemption does not include hot oil, hot air, or vapor phase solder leveling equipment and related control equipment.
- (7) Brazing ovens where no volatile organic compounds (except flux) are present in the materials processed in the ovens, provided such ovens are exempt pursuant to paragraph (b)(2).
- (8) Welding equipment ~~or oxygen gaseous fuel-cutting equipment, and control equipment venting such equipment~~ laser etching equipment, engraving of metal equipment and associated control equipment. This exemption does not include plasma arc-cutting equipment or laser cutting equipment that is used to cut stainless steel or alloys containing chromium, nickel, cadmium or lead, or laser cutters that are rated more than 136 amperes or more 400 watts and control equipment venting such equipment.
- (9) Sintering equipment used exclusively for the sintering of metal (excluding lead) or glass where no coke or limestone is used, and control equipment exclusively venting such equipment, provided such equipment is exempt pursuant to paragraph (b)(2).
- (10) Mold forming equipment for foundry sand to which no heat is applied, and where no volatile organic materials are used in the process, and control equipment used to exclusively venting such equipment.

- (11) Metal forming equipment or equipment used for heating metals for forging, rolling, pressing, or drawing of metals provided that any lubricants used have 50 grams or less of VOC per liter of material or a VOC composite partial pressure of 20 mm Hg or less at 20 °C (68 °F) ~~or~~ provided such heaters are exempt pursuant to paragraph (b)(2) and control equipment exclusively venting the equipment.
- (12) Heat treatment equipment used exclusively for heat treating glass or metals (provided no volatile organic compounds materials are present), or equipment used exclusively for case hardening, carburizing, cyaniding, nitriding, carbonitriding, siliconizing or diffusion treating of metal objects, provided any combustion equipment involved is exempt pursuant to paragraph (b)(2).
- (13) Ladles used in pouring molten metals.
- (14) Tumblers used for the cleaning or deburring of solid materials.
- (15) Die casting machines, except those used for copper base alloys, those with an integral furnace having a brimful capacity of more than 450 kg (992 lbs.), or those using a furnace not exempt pursuant to paragraph (b)(2).
- (16) Furnaces or ovens used for the curing or drying of porcelain enameling, or vitreous enameling provided such furnaces or ovens are exempt pursuant to paragraph (b)(2).
- (17) Wax burnout kilns where the total internal volume is less than 0.2 cubic meter (7.0 cubic feet) or kilns used exclusively for firing ceramic ware, provided such kilns are exempt pursuant to paragraph (b)(2) and control equipment used to exclusively venting the equipment.
- (18) Shell-core and shell-mold manufacturing machines.
- (19) Furnaces used exclusively for melting titanium materials in a closed evacuated chamber where no sweating or distilling is conducted, provided such furnaces are exempt pursuant to paragraph (b)(2).
- (20) Vacuum metallizing chambers which are electrically heated or heated with equipment that is exempt pursuant to paragraph (b)(2), and control equipment used to exclusively venting such equipment, provided the control equipment is equipped with a mist eliminator or the vacuum pump used with control equipment demonstrates operation with no visible emissions from the vacuum exhaust.

(f) Abrasive Blasting Equipment

- (1) Blast cleaning cabinets in which a suspension of abrasive in water is used and control equipment used to exclusively venting such equipment.
- (2) Manually operated abrasive blast cabinet, vented to a dust-filter where the total internal volume of the blast section is 1.5 cubic meters (53 cubic feet) or less, and any dust filter exclusively venting such equipment.
- (3) Enclosed equipment used exclusively for shot blast removal of flashing from rubber and plastics at sub-zero temperatures and control equipment exclusively venting such equipment.
- (4) Shot peening operations, flywheel type and control equipment used to exclusively venting such equipment.
- (5) Portable sand/water blaster equipment and associated ~~piston-type~~ internal combustion engine provided the water in the mixture is 66 percent or more by volume is maintained during operation of such equipment. ~~Piston-type internal—Internal~~ combustion engines must be exempt pursuant to paragraph (b)(1).

(g) Machining Equipment

- (1) Equipment used exclusively for buffing (except tire buffers), polishing, carving, mechanical cutting, drilling, machining, pressing, routing, sanding, stamping, surface grinding or turning provided that any lubricants, coolants, or cutting oils used have 50 grams or less of VOC per liter of material or a VOC composite partial pressure of 20 mm Hg or less at 20 °C (68 °F) and control equipment used to exclusively venting such equipment. This exemption does not include asphalt pavement grinders.
- (2) Equipment used exclusively for shredding of wood, or the extruding, handling, or storage of wood chips, sawdust, or wood shavings and control equipment used to exclusively venting such equipment. This exemption does not include ~~piston-type~~ internal combustion engines over 50 bhp, which are used to supply power to such equipment.
- (3) Equipment used exclusively to mill or grind coatings or molding compounds where all materials charged are in the paste form.

(h) Printing and Reproduction Equipment

- (1) Printing and related coating and/or laminating equipment and associated dryers and curing equipment, as well as associated air pollution control equipment, provided such dryers and curing equipment are exempt

pursuant to paragraph (b)(2), and air pollution control equipment is not required for source specific rule compliance, and provided that:

- (A) the VOC emissions from such equipment (including clean-up) are three pounds per day or less or 66 pounds per calendar month or less; or
- (B) the total quantity of plastisol type inks, coatings and adhesives and associated VOC containing solvents (including clean-up) is six (6) gallons per day or less or 132 gallons per calendar month or less; or
- (C) the total quantity of UV or electron beam type (non-solvent based and non-waterborne) inks, coatings, and adhesives, fountain solutions (excluding water) and associated VOC containing solvents (including clean-up) is six (6) gallons per day or less, or 132 gallons per calendar month or less; or
- (D) the total quantity of inks, coatings and adhesives not specified in (B) or (C) above, fountain solutions (excluding water) and associated VOC containing solvents (including clean-up) is two (2) gallons per day or less or 44 gallons per calendar month or less; or
- (E) all inks, coatings and adhesives, fountain solutions, and associated VOC containing solvents (excluding cleanup solvents) contain fifty (50) grams or less of VOC per liter of material and all cleanup solvents contain twenty five (25) grams or less of VOC per liter of material, and the total quantity of VOC emissions do not exceed one ton per calendar year, and provided a filing pursuant to Rule 222 is submitted to the Executive Officer.

If combination of the inks, coatings, and adhesives identified in (B), (C), and/or (D) are used in any equipment, this exemption is only applicable if the operations meet the criteria specified in (A) or (E), or the total usage of inks, coatings, adhesives, fountain solutions (excluding water) and associated VOC containing solvents (including cleanup) meets the most stringent applicable usage limit in (B), (C) or (D). For exemptions based on usage, solvent based UV and waterborne UV materials are subject to the usage limits in (D). VOC emissions shall be determined using test methods approved by the District, CARB and U.S. EPA. In the absence of approved test methods, the applicant can submit VOC calculation procedures acceptable to the District.

- (2) Photographic process equipment by which an image is reproduced upon material sensitized by radiant energy and control equipment exclusively venting such equipment, excluding wet gate printing utilizing perchloroethylene and its associated control equipment.
 - (3) Lithographic printing equipment which uses laser printing.
 - (4) Printing equipment used exclusively for training and non-production at educational institutions.
 - (5) Flexographic plate-making and associated processing equipment.
 - (6) Corona treating equipment and associated air pollution control equipment used for surface treatment in printing, laminating and coating operations.
 - (7) Hand application of materials used in printing operations including but not limited to the use of squeegees, screens, stamps, stencils, ~~and~~ any hand tools, and associated air pollution control equipment used to exclusively vent the hand application of materials in printing operations unless such air pollution control equipment is required for source specific rule compliance.
- (i) Pharmaceuticals, Cosmetics, and Food Processing and Preparation Equipment
- (1) Smokehouses for preparing food in which the maximum horizontal inside cross-sectional area does not exceed 2 square meters (21.5 square feet) and control equipment exclusively venting the equipment.
 - (2) Smokehouses exclusively using liquid smoke, and which are completely enclosed with no vents to either a control device or the atmosphere.
 - (3) Confection cookers where products are edible and intended for human consumption.
 - (4) Grinding, blending, or packaging equipment used exclusively for tea, cocoa, roasted coffee, flavor, fragrance extraction, dried flowers, or spices, provided that the facility uses less than one gallon per day or twenty-two (22) gallons per month of VOC containing solvents, and control equipment used to exclusively venting such equipment.
 - (5) Equipment used in eating establishments for the purpose of preparing food for human consumption.
 - (6) Equipment used to convey or process materials in bakeries or used to produce noodles, macaroni, pasta, food mixes, and drink mixes where products are edible and intended for human consumption provided that the facility uses less than one gallon per day or twenty-two (22) gallons per

month of VOC containing solvents, and control equipment exclusively venting such equipment. This exemption does not include storage bins located outside buildings, or equipment not exempt pursuant to paragraph (b)(2).

(7) Cooking kettles where ~~all the~~ the entire product in the kettle is edible and intended for human consumption. This exemption does not include deep frying equipment used in facilities other than eating establishments.

(8) Coffee roasting equipment with a maximum capacity of 10 pounds or less and control equipment used to exclusively venting the equipment.

(9) Equipment used exclusively for tableting, or packaging vitamins, or coating vitamins, herbs, or dietary supplements provided that the ~~facility equipment~~ uses waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter, or the facility uses less than one gallon per day or twenty-two (22) gallons per month of VOC containing solvents, and control equipment used exclusively to vent such equipment.

(10) Equipment used exclusively for tableting or packaging pharmaceuticals and cosmetics, or coating pharmaceutical tablets, provided that the ~~facility equipment~~ uses waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter, or the facility uses less than one gallon per day or twenty-two (22) gallons per month of VOC containing solvents, and control equipment used exclusively to vent such equipment.

(11) Modified atmosphere food packaging equipment using mixture of gases of no more than 0.4% of carbon monoxide by volume.

(12) Charbroilers in multi-family residential units only if used by the owner or occupant of such dwelling for non-commercial purposes.

(j) Plastics, Composite, and Rubber Processing Equipment

(1) Presses or molds used for curing, post curing, or forming composite products and plastic products where no VOC or chlorinated blowing agent is present, and control equipment is used exclusively to venting these presses or molds.

(2) Presses or molds with a ram diameter of less than or equal to 26 inches used for curing or forming rubber products and composite rubber products excluding those operating above 400 °F.

- (3) Ovens used exclusively for the forming of plastics or composite products, where no foam forming or expanding process is involved, provided such equipment is exempt pursuant to paragraph (b)(2).
- (4) Equipment used exclusively for softening or annealing plastics, provided such equipment is exempt pursuant to paragraph (b)(2).
- (5) Extrusion equipment used exclusively for extruding rubber products or plastics where no organic plasticizer is present, or for pelletizing polystyrene foam scrap, except equipment used to extrude or to pelletize acrylics, polyvinyl chloride, polystyrene, and their copolymers.
- (6) Injection or blow molding equipment for rubber or plastics where no blowing agent other than compressed air, water or carbon dioxide is used, and control equipment used to exclusively venting such equipment.
- (7) Mixers, roll mills and calendars for rubber or plastics where no material in powder form is added and no VOC containing solvents, diluents or thinners are used.
- (8) Ovens used exclusively for the curing of vinyl plastisols by the closed-mold curing process, provided such ovens are exempt pursuant to paragraph (b)(2).
- (9) Equipment used exclusively for conveying and storing plastic materials, provided they are not in powder form and control equipment exclusively venting the equipment.
- (10) Hot wire cutting of expanded polystyrene foam and woven polyester film.
- (11) Photocurable stereolithography equipment and associated post curing equipment.
- (12) Laser sintering equipment used exclusively for the sintering of nylon or plastic powders and control equipment exclusively venting such equipment, provided such equipment is exempt pursuant to paragraph (b)(2).
- (13) Roller to roller coating systems that create 3-dimensional images provided:
 - (A) the VOC emissions from such equipment (including cleanup) are three (3) pounds per day or less or 66 pounds per calendar month or less; or
 - (B) the coatings contain twenty five (25) grams or less of VOC per liter of material provided that the coating used on such equipment

is 12 gallons per day or less or 264 gallons per calendar month or less; or

- (C) the coatings contain fifty (50) grams or less of VOC per liter of material, and using exclusively cleanup solvents containing twenty five (25) grams or less of VOC per liter of material, and the total quantity of VOC emissions do not exceed one ton per calendar year, and provided a filing pursuant to Rule 222 is submitted to the Executive Officer.

VOC emissions shall be determined using test methods approved by the District, CARB and U.S. EPA. In the absence of approved test methods, the applicant can submit VOC calculation procedures acceptable to the District.

(k) Mixing, Blending, and Packaging Equipment

- (1) Batch mixers, which have a brimful capacity of 55 gallons or less (7.35 cubic feet) and control equipment used exclusively to venting the equipment, and associated filling equipment.
- (2) Equipment used exclusively for mixing and blending of materials where no VOC containing solvents are used and no materials in powder form are added, and associated filling equipment.
- (3) Equipment used exclusively for mixing and blending of materials to make water emulsions of asphalt, grease, oils, or waxes where no materials in powder or fiber form are added.
- (4) Equipment used to blend, grind, mix, or thin liquids to which powders- ~~are~~ may be added, with a capacity of 950 liters (251 gallons) or less, where no supplemental heat is added and no ingredient charged (excluding water) exceeds 135 °F and control equipment exclusively venting the equipment.
- (5) Cosmetics filling stations where the filling equipment is hard piped to the cosmetics mixer or the holding tank feeding the filling equipment provided that the mixer and holding tank is exempt under this rule.
- ~~(56)~~ Concrete mixers, with a rated working capacity of one cubic yard or less and control equipment used exclusively to venting the equipment.
- ~~(67)~~ Equipment used exclusively for the packaging of lubricants or greases.
- ~~(78)~~ Equipment used exclusively for the packaging of sodium hypochlorite-based household cleaning or sodium hypochlorite-based pool products and control equipment used exclusively to venting the equipment.

(89) Foam packaging equipment using twenty (20) gallons per day or less or 440 gallons per calendar month or less of liquid foam material or containing fifty (50) grams of VOC per liter of material, or less.

(l) Coating and Adhesive Process/Equipment

- (1) Equipment used exclusively for coating objects with oils, melted waxes or greases which contain no VOC containing materials, including diluents or thinners.
- (2) Equipment used exclusively for coating objects by dipping in waxes or natural and synthetic resins which contain no VOC containing materials including, diluents or thinners.
- (3) Batch ovens with 1.5 cubic meters (53 cubic feet) or less internal volume where no melting occurs, provided such equipment is exempt pursuant to paragraph (b)(2). This exemption does not include ovens used to cure vinyl plastisols or debond brake shoes.
- (4) Ovens used exclusively to cure 30 pounds per day or less or 660 pounds per calendar month or less of powder coatings, provided that such equipment is exempt pursuant to paragraph (b)(2).
- (5) Spray coating equipment operated within control enclosures.
- (6) Coating or adhesive application or laminating equipment such as air, airless, air-assisted airless, high volume low pressure (HVLP), air brushes, ~~and~~ electrostatic spray equipment, ~~and~~ roller coaters, dip coaters, vacuum coaters, flow coaters and spray machines- provided that:
 - (A) the VOC emissions from such equipment (including clean-up) are three (3) pounds per day or less or 66 pounds per calendar month or less; or
 - (B) the total quantity of UV or electron beam (non-solvent based and non-waterborne) coatings adhesives and associated VOC containing solvents (including clean-up) used in such equipment is six (6) gallons per day or less or 132 gallons per calendar month or less; or
 - (C) the total quantity of organic solvent based coatings and adhesives and associated VOC containing solvents (including clean-up) used in such equipment is one (1) gallon per day or less or 22 gallons per calendar month or less; or

- (D) the total quantity of water reducible or waterborne coatings and adhesives and associated VOC containing solvents (including clean-up) used in such equipment is three (3) gallons per day or less or 66 gallons per calendar month or less; or
- (E) the total quantity of polyester resin and gel coat type materials and associated VOC containing solvents (including clean-up) used in such equipment is one (1) gallon per day or less or 22 gallons per calendar month or less; or
- (F) all coatings, adhesives, polyester resin and gel coat type materials and associated VOC containing solvents (excluding cleanup solvents) contain fifty (50) grams or less of VOC per liter of material and all cleanup solvents contain twenty five (25) grams or less of VOC per liter of material, and the total quantity of VOC emissions do not exceed one ton per calendar year, and provided a filing pursuant to Rule 222 is submitted to the Executive Officer.

If combination of the coatings, adhesives and polyester resin and gel coat type materials identified in (B), (C), (D) and/or (E) are used in any equipment, this exemption is only applicable if the operations meet the criteria specified in (A) or (F), or the total usage of coatings, adhesives, polyester resin and gel coat type materials and associated VOC containing solvents (including cleanup) meets the most stringent applicable limit in (B), (C), (D) or (E). For exemptions based on usage, ~~solvent-solvent-~~based UV and waterborne UV materials are subject to the usage limits in (C) and (D), respectively. VOC emissions shall be determined using test methods approved by the District, CARB and U.S. EPA. In the absence of approved test methods, the applicant can submit VOC calculation procedures acceptable to the District.

- (7) Spray coating and associated drying equipment and control enclosures used exclusively for educational purposes in educational institutions.
- (8) Control enclosures with an internal volume of 27 cubic feet or less, provided that aerosol cans, air brushes, or hand ~~applications-work~~ are used exclusively.
- (9) Portable coating equipment and pavement stripers used exclusively for the application of architectural coatings and associated internal combustion engines provided such equipment is exempt pursuant to subdivision (a) or paragraph (b)(1).

- (10) Hand application of resins, adhesives, dyes, and coatings using devices such as brushes, daubers, rollers, and trowels.
- (11) Drying equipment such as flash-off ovens, drying ovens, or curing ovens associated with coating or adhesive application or laminating equipment provided the drying equipment is exempt pursuant to paragraph (b)(2), and provided that:
 - (A) the total quantity of VOC emissions from all coating and/or adhesive application, and laminating equipment that the drying equipment serves is three (3) pounds per day or less or 66 pounds per calendar month or less; or
 - (B) the total quantity of UV or electron beam (non-solvent based and non-waterborne) coatings and adhesives, and associated VOC containing solvents (including clean-up) used in all coating and/or adhesive application, and laminating equipment that the drying equipment serves is six (6) gallons per day or less or 132 gallons per calendar month or less; or
 - (C) the total quantity of solvent based coatings and adhesives and associated VOC containing solvents (including clean-up) used in all coating and/or adhesive application, and laminating equipment that the drying equipment serves is one (1) gallon per day or less or 22 gallons per calendar month or less; or
 - (D) the total quantity of water reducible or waterborne coating and adhesives and associated VOC containing solvents (including clean-up) used in all coating and/or adhesive application, and laminating equipment that the drying equipment serves is three (3) gallons per day or less or 66 gallons per calendar month or less; or
 - (E) the total quantity of polyester resin and gel coat type materials and associated VOC containing solvents (including clean-up) used in all coating, adhesive application, and laminating equipment that the drying equipment serves is one (1) gallon per day or less or 22 gallons per calendar month or less; or
 - (F) all coatings, adhesives, polyester resin and gel coat type materials and associated VOC containing solvents (excluding cleanup solvents) contain fifty (50) grams or less of VOC per liter of material and all cleanup solvents contain twenty five (25) grams or less of VOC per liter of material, and the total quantity of VOC

emissions do not exceed one ton per calendar year, and provided a filing pursuant to Rule 222 is submitted to the Executive Officer. If combination of the coatings, adhesives and polyester resin and gel coat type materials identified in (B), (C), (D) and/or (E) are used in any equipment, this exemption is only applicable if the operations meet the criteria specified in (A) or (F), or the total usage of coatings, adhesives, polyester resin and gel coat type materials and associated VOC containing solvents (including cleanup) meets the most stringent applicable limit in (B), (C), (D) or (E). For exemptions based on usage, solvent based UV and waterborne UV materials are subject to the usage limits in (C) and (D), respectively. VOC emissions shall be determined using test methods approved by the District, CARB and US EPA. In the absence of approved test methods, the applicant can submit VOC calculation procedures acceptable to the District.

(m) Storage and Transfer Equipment

- (1) Equipment used exclusively for the storage and transfer of fresh, commercial or purer grades of:
 - (A) Sulfuric acid or phosphoric acid with an acid strength of 99 percent or less by weight.
 - (B) Nitric acid with an acid strength of 70 percent or less by weight.
 - (C) Water based solutions of salts or sodium hydroxide.
- (2) Equipment used exclusively for the storage and/or transfer of liquefied gases, not including:
 - (A) LPG greater than 10,000 pounds.
 - (B) Hydrogen fluoride greater than 100 pounds.
 - (C) Anhydrous ammonia greater than 500 pounds.
- (3) Equipment used exclusively for the transfer of less than 75,700 liters (20,000 gallons) per day of unheated VOC containing materials, with an initial boiling point of 150 °C (302 °F) or greater, or with an organic vapor pressure of 5 mm Hg (0.1 psi) absolute or less at 21.1 °C (70 °F).
- (4) Equipment used exclusively for the storage including dispensing of unheated- VOC containing materials with an initial boiling point of 150 °C (302 °F) or greater, or with an organic vapor pressure of 5 mm Hg (0.1 psi) absolute or less at 21.1 °C (70 °F). This exemption does not include liquid fuel storage greater than 160,400 liters (40,000 gallons).

- (5) Equipment used exclusively for transferring VOC containing liquids, materials containing VOCs, or compressed gases into containers of less than 225 liters (60 gallons) capacity, except equipment used for transferring more than 4,000 liters (1,057 gallons) of materials per day with a vapor pressure greater than 25.8 mm Hg (0.5 psia) at operating conditions.
- (6) Equipment used exclusively for the storage and transfer of liquid soaps, liquid detergents, vegetable oils, fatty acids, fatty esters, fatty alcohols, waxes and wax emulsions.
- (7) Equipment used exclusively for the storage and transfer of refined lubricating or hydraulic oils and control equipment used to exclusively vent such equipment.
- (8) Equipment used exclusively for the storage and transfer of crankcase drainage oil and control equipment used to exclusively vent such equipment.
- (9) Equipment used exclusively for VOC containing liquid storage or transfer to and from such storage, of less than 950 liters (251 gallons) capacity and or equipment used exclusively for the storage of odorants for natural gas, propane, or oil with a holding capacity of less than 950 liters (251 gallons) capacity and associated transfer and control equipment used exclusively for such equipment provided a filing pursuant to Rule 222 is submitted to the Executive Officer. This exemption does not include asphalt.
- (10) Equipment used exclusively for the storage and transfer of "top white" (i.e., Fancy) or cosmetic grade tallow or edible animal fats intended for human consumption and of sufficient quality to be certifiable for United States markets.
- (11) Equipment, including tar pots (or tar kettles), used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch with a maximum holding capacity of less than 600 liters (159 gallons); or equipment, including tar pots (or tar kettles), used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch with a with a maximum holding capacity of no more than 3,785 liters (1,000 gallons), is equipped with burner(s) designed to fire exclusively on liquefied petroleum gases, and provided a filing pursuant to Rule 222 is submitted to the Executive Officer.
- (12) Pumps used exclusively for pipeline transfer of liquids.

- (13) Equipment used exclusively for the unheated underground storage of 23,000 liters (6,077 gallons) or less, and equipment used exclusively for the transfer to or from such storage of organic liquids with a vapor pressure of 77.5 mm Hg (1.5 psi) absolute or less at actual storage conditions.
- (14) Equipment used exclusively for the storage and/or transfer of an asphalt-water emulsion heated to 150 °F or less.
- (15) Liquid fuel storage tanks piped exclusively to emergency internal combustion engine-generators, turbines or pump drivers.
- (16) Bins used for temporary storage and transport of material with a capacity of 2,080 liters (550 gallons) or less.
- (17) Equipment used for material storage where no venting occurs during filling or normal use.
- (18) Equipment used exclusively for storage, blending, and/or transfer of water emulsion intermediates and products, including latex, with a VOC content of 5% by volume or less or a VOC composite partial pressure of 5 mm Hg (0.1 psi) or less at 20 °C (68 °F).
- (19) Equipment used exclusively for storage and/or transfer of sodium hypochlorite solution.
- (20) Equipment used exclusively for the storage of VOC containing materials which are stored at a temperature at least 130 °C (234 °F) below its initial boiling point, or have an organic vapor pressure of 5 mm Hg (0.1 psia) absolute or less at the actual storage temperature. To qualify for this exemption, the operator shall, if the stored material is heated, install and maintain a device to measure the temperature of the stored VOC containing material. This exemption does not include liquid fuel storage greater than 160,400 liters (40,000 gallons), asphalt storage, or coal tar pitch storage.
- (21) Stationary equipment used exclusively to store and/or transfer organic compounds that do not contain VOCs.
- (22) Unheated equipment including associated control equipment used exclusively for the storage and transfer of fluorosilicic acid at a concentration of 30% or less by weight and a vapor pressure of 24 mm Hg or less at 77 ~~°F degrees Fahrenheit~~ (25 ~~°C degrees Celsius~~). The hydrofluoric acid concentration within the fluorosilicic acid solution shall not exceed 1% by weight.

(23) Equipment, including asphalt day tankers, used exclusively for the storage, holding, melting, and transfer of asphalt or coal tar pitch, that is mounted on a motor vehicle with a maximum holding capacity of less than 600 liters (159 gallons); or equipment, including asphalt day tankers, used exclusively for the storage, holding, melting, and transfer of asphalt or coal tar pitch, that is mounted on a motor vehicle, with a maximum holding capacity of no more than 18,925 liters (5,000 gallons), is equipped with burner(s) designed to fire exclusively on liquefied petroleum gases only, and provided a filing pursuant to Rule 222 is submitted to the Executive Officer.

(n) Natural Gas and Crude Oil Production Equipment

- (1) Well heads and well pumps.
- (2) Crude oil and natural gas pipeline transfer pumps.
- (3) Gas, hydraulic, or pneumatic repressurizing equipment.
- (4) Equipment used exclusively as water boilers, water or hydrocarbon heaters, and closed heat transfer systems (does not include steam generators used for oilfield steam injection) that have:
 - (A) a maximum heat input rate of 2,000,000 Btu per hour or less, and
 - (B) been equipped to be fired exclusively with purchased quality natural gas, liquefied petroleum gas, produced gas which contains less than 10 ppm hydrogen sulfide, or any combination thereof.
- (5) The following equipment used exclusively for primary recovery, and not associated with community lease units:
 - (A) Gas separators and boots.
 - (B) Initial receiving, gas dehydrating, storage, washing and shipping tanks with an individual capacity of 34,069 liters (9,000 gallons) or less.
 - (C) Crude oil tank truck loading facilities (does not include a loading rack), and gas recovery systems exclusively serving tanks exempted under subparagraph (n)(5)(B).
 - (D) Produced gas dehydrating equipment.
- (6) Gravity-type oil water separators with a total air/liquid interfacial area of less than 45 square feet and the oil specific gravity of 0.8251 or higher (40.0 API or lower).

The following definitions will apply to subdivision (n) above:

PRIMARY RECOVERY - Crude oil or natural gas production from "free-flow" wells or from well units where only water, produced gas or purchased quality gas is injected to repressurize the production zone.

COMMUNITY LEASE UNITS - Facilities used for multiple-well units (three or more wells), whether for a group of wells at one location or for separate wells on adjoining leases.

SHIPPING TANKS - Fixed roof tanks, which operate essentially as "run down" tanks for separated crude oil where the holding time is 72 hours or less.

WASH TANKS - Fixed roof tanks which are used for gravity separation of produced crude oil/water, including single tank units, and which are used concurrently for receipt, separation, storage and shipment.

(o) Cleaning

The exemptions in this subdivision do not include any equipment using solvents that are greater than 5 percent by weight of perchloroethylene, methylene chloride, carbon tetrachloride, chloroform, 1,1,1-trichloroethane, trichloroethylene, or any combination thereof, with either a capacity of more than 7.6 liters (2 gallons) or was designed as a solvent cleaning and drying machine regardless of size. In addition, the exemptions specified in this subdivision apply only if the equipment is also exempt pursuant to paragraph (b)(2) of this rule.

(1) Cleaning equipment and associated waste storage tanks used exclusively to store the solutions drained from this equipment:

(A) unheated batch, provided:

- (i) the volume of the solvent reservoir is one (1) gallon or less, or
- (ii) the VOC emissions from the equipment are not more than 3 pounds per day or 66 pounds per calendar month.

(B) devices used for cleaning of equipment used for the application of inks, adhesives, and coatings provided:

- (i) the volume of the solvent reservoir is five (5) gallons or less, or
- (ii) the VOC emissions from the equipment are not more than three (3) pounds per day or 66 pounds per calendar month.

- (C) remote reservoir cleaners, provided the solvent from the sink-like area immediately drains into an enclosed solvent container while the parts are being cleaned.
 - (2) Vapor degreasers with an air/vapor interface surface area of 1.0 square foot or less, provided such degreasers have an organic solvent loss of 3 gallons per day or less excluding water or 66 gallons per calendar month or less excluding water.
 - (3) Cleaning equipment using materials with a VOC content of twenty-five (25) grams of VOC per liter of material, or less, and associated dryers exclusively serving these cleaners, provided such equipment is also exempt pursuant to paragraph (b)(2).
 - (4) Hand application of solvents for cleaning purposes including but not limited to the use of rags, daubers, swabs, and squeeze bottles as well as associated air pollution control equipment, unless air pollution control equipment is required for source specific rule compliance.
- (p) Miscellaneous Process Equipment
- (1) Equipment, including dryers, used exclusively for dyeing, stripping, or bleaching of textiles where no VOC containing materials, including diluents or thinners are used, provided such equipment is also exempt pursuant to paragraph (b)(2) and control equipment exclusively venting the equipment.
 - (2) Equipment used exclusively for bonding lining to brake shoes, where no VOC containing materials are used and control equipment exclusively venting such equipment.
 - (3) Equipment used exclusively to liquefy or separate oxygen, nitrogen, or the rare gases from air, except equipment not exempt pursuant to paragraph (b)(1) or (b)(2).
 - (4) Equipment used exclusively for surface preparation, including but not limited to paint stripping, pickling, desmutting, de-scaling, passivation, and/or deoxidation, and any water and associated rinse tanks and waste storage tanks exclusively to store the solutions drained from the equipment, that exclusively uses any one or combination of the following:
 - (A) organic materials containing 50 grams or less of VOCs per liter of material;

- (B) formic acid, acetic acid, boric acid, citric acid, phosphoric acid, and sulfuric acids;
- (C) hydrochloric acid in concentrations of 12 percent by weight or less;
- (D) alkaline oxidizing agents;
- (E) hydrogen peroxide;
- (F) salt solutions, except for air-sparged or rectified processes with salt solutions containing hexavalent chromium, chromates, dichromates, nickel, or cadmium;
- (G) sodium hydroxide, provided the process is not sparged or rectified; or
- (H) nitric acid, hydrochloric acid, or hydrofluoric acid, provided that the equipment in which it is used has an open surface area of one square foot or less, is unheated, and produces no visible emissions.

This exemption does not include chemical milling or circuit board etching using ammonia-based etchants.

- (5) Equipment used exclusively for the plating, stripping, or anodizing of metals as described below:
 - (A) electrolytic plating of exclusively brass, bronze, copper, iron, tin, lead, zinc, and precious metals;
 - (B) electroless nickel plating, provided that the process is not air-sparged and no electrolytic reverse plating occurs;
 - (C) the electrolytic stripping of brass, bronze, copper, iron, tin, zinc, and precious metals, provided no chromic, hydrochloric, nitric or sulfuric acid is used;
 - (D) the non-electrolytic stripping of metals, provided the stripping solution is not sparged and does not contain nitric acid.
 - (E) anodizing using exclusively sulfuric acid and/or boric acid with a total bath concentration of 20 percent acids or less by weight and using 10,000 amp-hours per day or less of electricity;
 - (F) anodizing using exclusively phosphoric acid with a bath concentration of 15 percent or less phosphoric acid by weight and using 20,000 amp-hours per day or less of electricity; or
 - (G) water and associated rinse tanks and waste storage tanks used exclusively to store the solutions drained from equipment used for the plating, stripping, or anodizing of metals.

- (6) Closed loop solvent recovery systems used for recovery of waste solvent generated on-site using refrigerated or liquid-cooled condenser, or air-cooled (where the solvent reservoir capacity is less than 10 gallons) condenser.
- (7) Equipment used exclusively for manufacturing soap or detergent bars, including mixing tanks, roll mills, plodders, cutters, wrappers, where no heating, drying or chemical reactions occur.
- (8) Inert gas generators, except equipment not exempt pursuant to paragraph (b)(2).
- (9) Hammermills used exclusively to process aluminum and/or tin cans, and control equipment exclusively venting such equipment.
- (10) Paper shredding; and carpet and paper shearing as well as associated conveying systems, baling equipment, and control equipment venting such equipment.
- (11) Chemical vapor type sterilization equipment where no Ethylene Oxide is used, and with a chamber volume of two (2) cubic feet or less used by healthcare facilities and control equipment exclusively venting the equipment.
- (12) Hot melt adhesive equipment.
- (13) Pyrotechnic equipment, special effects or fireworks paraphernalia equipment used for entertainment purposes, provided such equipment is exempt pursuant to subdivision (b).
- (14) Ammunition or explosive testing equipment.
- (15) Fire extinguishing equipment using halons.
- (16) Industrial wastewater treatment equipment which only does pH adjustment, precipitation, gravity separation and/or filtration of the wastewater, including equipment used for reducing hexavalent chromium and/or destroying cyanide compounds. This exemption does not include treatment processes where VOC and/or toxic materials are emitted, or where the inlet concentration of cyanide salts through the wastewater treatment process prior to pH adjustment exceeds 200 mg/liter.
- (17) Rental equipment operated by a lessee and which is not located more than twelve consecutive months at any one facility in the District provided that the owner of the equipment has a permit to operate issued by the District and that the lessee complies with the terms and conditions of the permit to operate.

- (18) Industrial wastewater evaporators treating water generated from on-site processes only, where no VOC and/or toxic materials are emitted and provided that the equipment is exempt pursuant to paragraph (b)(2).
 - (19) Foam application equipment using ~~two-two~~-component polyurethane foam where no VOC containing blowing agent is used, excluding chlorofluorocarbons or methylene chloride, and control equipment exclusively venting this equipment.
 - (20) Toner refilling and associated control equipment.
 - (21) Evaporator used at dry cleaning facilities to dispose of separator wastewater and control equipment exclusively venting the equipment.
 - (22) Equipment used to recycle aerosol cans by puncturing the can in an enclosed system which is vented through an activated carbon filter. This exemption shall only apply to aerosol recycling systems where the aerosol can to be recycled was used as part of their operation at the facility or from facilities under common ownership.
- (q) **Agricultural Sources**
- (1) Notwithstanding the exemption under this subdivision, any internal combustion engines, or gasoline transfer and dispensing equipment purchased or modified after July 7, 2006 that are not exempt pursuant to paragraphs (b)(1), (b)(6), and (m)(9) of this rule shall be subject to permit requirements. Emergency internal combustion engines are exempt from permit requirements for these agricultural sources.
 - (2) Except as provided in paragraph (q)(1), agricultural permit units at agricultural sources not subject to Title V with actual emissions less than the amounts listed in the following table:

Table

Pollutant (Tons/Year)	South Coast Air Basin	Riverside County Portion of Salton Sea Air Basin	Riverside County Portion of Mojave Desert Air Basin
VOC	5.0	12.5	50.0
NOx	5.0	12.5	50.0
SOx	50.0	50.0	50.0
CO	25.0	50.0	50.0
PM10	35.0	35.0	50.0
Single Hazardous			

Air Pollutant	5.0	5.0	5.0
Combination Hazardous Air Pollutants	12.5	12.5	12.5

Emissions of fugitive dust and emissions from soil amendments and fertilizers are not to be counted when evaluating emissions for purposes of this subdivision.

- (3) Orchard wind machines powered by an internal combustion engine with a manufacturer's rating greater than 50 brake horsepower, provided the engine is operated no more than 30 hours per calendar year.
- (4) Orchard heaters approved by the California Air Resources Board to produce no more than one gram per minute of unconsumed solid carbonaceous material.

(r) Registered Equipment and Filing Program

- (1) Any portable equipment which is registered in accordance with the Statewide Portable Equipment Registration Program adopted pursuant to California Health and Safety Code Section 41750 et seq.
- (2) Any equipment listed in Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II.

(s) Exceptions

Notwithstanding equipment identified in (a) through (r) of this rule, written permits are required pursuant to paragraphs (s)(1) and (s)(2) and filings are required under Rule 222 pursuant to paragraph (s)(3):

- (1) Equipment, process materials or air contaminants subject to:
 - (A) Regulation IX – Standards of Performance for New Stationary Sources (NSPS); or
 - (B) Regulation X – National Emission Standards for Hazardous Air Pollutants (NESHAP - Part 61, Chapter I, Title 40 of the Code of Federal Regulations); or
 - (C) Emission limitation requirements of either the state Air Toxic Control Measure (ATCM) or NESHAP - Part 63, Title 40 of the Code of Federal Regulations; or

- (2) Equipment when the Executive Officer has determined that the risk will be greater than identified in subparagraph (d)(1)(A), or paragraphs (d)(2) or (d)(3) in Rule 1401 – New Source Review of Toxic Air Contaminants or the equipment may not operate in compliance with all applicable District Rules and Regulations. Once the Executive Officer makes such a determination and written notification is given to the equipment owner or operator, the equipment shall thereafter be subject to Rules 201 and 203 for non-RECLAIM sources, Rule 2006 for RECLAIM sources, and Regulation XXX – Title V Permits for major sources.
- (3) The following equipment, processes or operations that are located at a single facility, which does not hold a written permit for any other equipment, processes or operations, and emit four (4.0) tons or more of VOCs in any Fiscal Year (July 1 to June 30) beginning July 1, 2007 or emitted four (4.0) tons or more of VOCs in the Fiscal Year July 1, 2006 – June 30, 2007. The four (4.0) ton per Fiscal Year threshold shall be calculated cumulatively for all categories of equipment, processes or operations listed in subparagraphs (A) through (C) below. One filing shall be required for all of the categories of equipment, processes or operations subject to this provision as listed in subparagraphs (A) through (C) below. Associated VOC emissions shall be reported under the Annual Emissions Reporting program and fees shall be paid pursuant to Rule 301, subdivision (t).
 - (A) Printing operations individually exempted under paragraph (h)(1) and (h)(7).
 - (B) Coating or adhesive application or laminating equipment and devices individually exempted under paragraphs (l)(6) and (l)(10).
 - (C) Hand applications of VOC containing materials individually exempted under paragraph (o)(4).
- (t) Recordkeeping

Any person claiming exemptions under the provisions of this Rule shall provide adequate records pursuant to Rule 109 and any applicable Material Safety Data Sheets (MSDS), to verify and maintain any exemption. Any test method used to verify the percentages, concentrations, vapor pressures, etc., shall be the approved test method as contained in the District’s Test Method Manual or any method approved by the Executive Officer, CARB, and the EPA.

(u) Compliance Date

- (1) The owner/operator of equipment previously not requiring a permit pursuant to Rule 219 shall comply with Rule 203 – Permit to Operate within one year from the date the rule is amended to remove the exemption unless compliance is required before this time by written notification by the Executive Officer. Effective on or after July 11, 2003 for purpose of Rule 301(e), emissions from equipment that has been removed from an exemption shall be considered “permitted” beginning January 1 or July 1, whichever is sooner, after Rule 219 is amended to remove the exemption, even if an application has not been submitted to obtain a permit.
- (2) Agricultural sources constructed or operating prior to January 1, 2004 requiring Title V permits shall submit Title V permit applications on or before June 29, 2004.
- (3) Existing agricultural permit units constructed or operating prior to January 1, 2004 at agricultural sources requiring Title V permits and requiring written permits pursuant to paragraph (q)(1) shall submit applications for a Permit to Operate by December 17, 2004. For the purpose of Rule 301(e), emissions from agricultural permit units subject to this paragraph shall be considered “permitted” July 1, 2005.
- (4) Existing agricultural permit units constructed or operating prior to January 1, 2004 at agricultural sources not subject to Title V with actual emissions equal to or greater than the amounts listed in the table in subdivision (q) and requiring written permits pursuant to paragraph (q)(2) shall submit applications for a Permit to Operate by June 30, 2005. For the purpose of Rule 301(e), emissions from agricultural permit units subject to this paragraph shall be considered “permitted” July 1, 2005.
- (5) Agricultural permit units built, erected, altered, modified, installed or replaced after January 1, 2004, but prior to January 1, 2005 if written permits are required pursuant to subdivision (q), shall submit applications for a Permit to Operate by March 5, 2005. For the purpose of Rule 301(e), emissions from agricultural permit units subject to this paragraph shall be considered “permitted” July 1, 2005.
- (6) Agricultural permit units built, erected, altered, modified, installed or replaced on or after January 1, 2005, if written permits are required pursuant to subdivision (q) shall comply with Rule 201. For the purpose

of Rule 301(e), emissions from agricultural permit units subject to this paragraph shall be considered “permitted” July 1, 2005.

ATTACHMENT F

(Adopted September 11, 1998)(Amended May 19, 2000)(Amended March 5, 2004)
(Amended December 5, 2008)(Proposed Amended Rule 222 May 2013)

PROPOSED AMENDED RULE 222. FILING REQUIREMENTS FOR SPECIFIC EMISSION SOURCES NOT REQUIRING A WRITTEN PERMIT PURSUANT TO REGULATION II

(a) Purpose

The purpose of this rule is to provide an alternative to written permits. This rule requires owners/operators of specified emission sources to submit information regarding the source, including, but not limited to:

- (1) a description of the source;
- (2) data necessary to estimate emissions from the source; and
- (3) information to determine whether the equipment is operating in compliance with applicable District, state and federal rules and regulations.

(b) Applicability

(1) This rule applies to owners/operators of the ~~following~~ emission sources listed in Table 1, which are exempt from written permits pursuant to Rule 219, unless the Executive Officer determines that the source cannot operate in compliance with applicable rules and regulations. This rule also applies to agricultural diesel-fueled engines subject to the California Air Resources Board Airborne Toxic Control Measure (CARB ATCM) for Stationary Compression Ignition Engines. Owners/operators authorized to operate emission sources pursuant to this rule shall operate those emissions sources in compliance with any and all operating conditions imposed by the District.

TABLE I

SOURCE/EQUIPMENT	EFFECTIVE DATE
Boilers or Steam Generators & Process Heaters with a rated heat input capacity from 1,000,000 up to and including 2,000,000 Btu/hr <u>and produce less than one pound of NOx emissions per day</u> , excluding equipment subject to Regulation XX – Regional Clean Air Incentives Market (RECLAIM).	1/1/2001
Commercial Charbroilers and associated air pollution control equipment.	1/1/1999

Negative Air Machines (Asbestos).	1/1/1999
Oil Production Well Group.	1/1/2004
Printing and related coating and/or laminating equipment and associated dryers and curing equipment exempt from <u>a</u> written permit pursuant to Rule 219 <u>(h)(1)(E)</u> .	12/5/2008
Roller to roller coating systems that create 3-dimensional images exempt from <u>a</u> written permit pursuant to Rule 219 <u>(j)(13)(C)</u> .	12/5/2008
Coating or adhesive application, or laminating equipment exempt from <u>a</u> written permit pursuant to Rule 219 <u>(l)(6)(F)</u> .	12/5/2008
Drying equipment such as flash-off ovens, drying ovens, or curing ovens associated with coating or adhesive application, or laminating equipment exempt from <u>a</u> written permit pursuant to Rule 219 <u>(l)(11)(F)</u> .	12/5/2008
Agricultural Diesel-Fueled Engines rated greater than 50 brake horse power used in Agricultural Operations exempt from <u>a</u> written permit pursuant to Rule 219 <u>(q)(1)</u> and <u>(q)(2)</u> , and subject to CARB ATCM.	12/5/2008
Equipment, processes or operations located at a facility holding no written permit and emitting four tons or more of VOCs per year as specified in Rule 219 <u>(s)(3)</u> .	12/5/2008
Gasoline storage tanks and dispensing equipment with capacity greater than or equal to 251 gallons, and installed on or before July 7, 2006 at agricultural operations.	12/5/2008
<u>Asphalt Day Tankers, with a maximum holding capacity greater than 600 liters (159 gallons) but no more than 18,925 liters (5,000 gallons) and are equipped with a demister and burner(s) designed to fire exclusively on liquefied petroleum gases.</u>	<u>5/3/2013</u>
<u>Asphalt Pavement Heaters used for road maintenance and new road construction.</u>	<u>5/3/2013</u>
<u>Diesel Fueled Boilers that have a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fueled exclusively with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland and have been in operation prior to May 3, 2013.</u>	<u>5/3/2013</u>
<u>Food Ovens with a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fired exclusively on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day.</u>	<u>5/3/2013</u>
<u>Fuel Cells, which produce electricity in an electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies; and associated heating equipment, including heaters that have a rated maximum heat input capacity of greater than 2,000,000 Btu per hour, provided that the supplemental heat used is 90,000 therms per year or less.</u>	<u>5/3/2013</u>
<u>Internal combustion engines used exclusively for electrical generation at remote two-way radio transmission towers where no</u>	<u>5/3/2013</u>

<u>utility, electricity or natural gas is available within a ½ mile radius, has a manufacturer's rating of 100 brake horsepower or less, and are fired exclusively on diesel #2 fuel.</u>	
<u>Micro-Turbines, with a rated maximum heat input capacity of 3,500,000 Btu per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation manufacture with the state of California or were in operation prior to May 3, 2013.</u>	<u>5/3/2013</u>
<u>Portable Diesel Fueled Heaters, with a rated maximum heat input capacity of 250,000 Btu per hour or less and are equipped with burner(s) designed to fire exclusively on diesel #2 fuel.</u>	<u>5/3/2013</u>
<u>Power Pressure Washers and Hot Water or Steam Washers and Cleaners, that are equipped with a heater or burner that is designed to be fired on diesel fuel, has a rated maximum heat input capacity of 550,000 Btu per hour or less, is equipped with a non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day and uses no more than 50 gallons of fuel per day.</u>	<u>5/3/2013</u>
<u>Storage of odorants for natural gas, propane, or oil with a holding capacity of less than 950 liters (251 gallons) and associated transfer and control equipment.</u>	<u>5/3/2013</u>
<u>Tar Pots or Tar Kettles, with a maximum holding capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and are equipped with burner(s) designed to fire exclusively on liquefied petroleum gases.</u>	<u>5/3/2013</u>

(2) If a determination is made that the source cannot operate in compliance with applicable rules and regulations, a permit ~~is~~shall be required pursuant to Rule 203.

(c) Definitions

For the purpose of this rule, the following definitions shall apply:

- (1) AGRICULTURAL OPERATIONS means the growing and harvesting of crops or the raising of fowl or animals for the primary purpose of making a profit, providing a livelihood, or conducting agricultural research or instruction by an educational institution. Agricultural operations do not include activities involving the processing or distribution of crops or fowl or animals.
- (2) AGRICULTURAL DIESEL-FUELED ENGINE is a stationary or portable engine used for agricultural operations. For the purpose of this rule, a portable engine owned by the agricultural source owner is

considered to be part of the agricultural stationary source. An engine used in the processing or distribution of crops or fowl or animals is not an agricultural engine.

- (3) APPROVED OPERATING PARAMETERS mean a set of operating requirements the equipment must operate under to comply with the requirements of any applicable federal, state, or District rules.
- (4) ASPHALT DAY TANKER is a storage tank mounted on a motor vehicle and is used exclusively for the storage, holding, melting, and transfer of asphalt or coal tar pitch with a maximum holding capacity greater than 600 liters (159 gallons) but no more than 18,925 liters (5,000 gallons), is equipped with a demister and burner(s) designed to fire exclusively on liquefied petroleum gases.
- (5) ASPHALT PAVEMENT HEATER is any mobile equipment used to heat asphalt or coal tar pitch for purposes of road maintenance or new road construction.
- (46) BOILER OR STEAM GENERATOR means any combustion equipment that is fired with or is designed to be fired with natural gas, used to produce steam or to heat water, and that is not used exclusively to produce electricity for sale. Boiler or Steam Generator does not include any waste heat recovery boiler that is used to recover sensible heat from the exhaust of a combustion turbine or any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.
- (57) BTU means British thermal unit or units.
- (68) CHARBROILER means a cooking device composed of a grated grill or skewer and a heat source. The heat source is located beneath the food being cooked or may be located above and below the food. Fuels for the heat source include, but are not limited to, electricity, natural gas, liquefied petroleum gas, charcoal, or wood.
- (9) DIESEL FUELED BOILER is any boiler that has a rated maximum heat input capacity of 2,000,000 Btu per hour or less, is fired exclusively with diesel #2 fuel, and is located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland and has been in operation prior to May 3, 2013.

- (~~7~~10) EMISSION SOURCE (SOURCE) means any equipment or process, which emits air pollutants for which ambient air quality standards have been adopted, or which emits their precursor pollutants.
- (~~8~~11) FACILITY is any equipment or group of equipment or other VOC-emitting activities, which are located on one or more contiguous properties within the District, in actual physical contact or separated solely by a public roadway or other public right-of-way, and are owned or operated by the same person (or by persons under common control), or an outer continental shelf (OCS) source as determined in 40 CFR Section 55.2. Such above-described groups, if noncontiguous, but connected only by land carrying a pipeline, shall not be considered one facility.
- (12) FOOD OVEN is any equipment used exclusively for food preparation, has a rated maximum heat input capacity of 2,000,000 Btu per hour or less, and is exclusively fired on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day.
- (13) FUEL CELL is any equipment which produces electricity in an electro-chemical reaction, uses phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies; and associated heating equipment, including heaters that have a rated maximum heat input capacity of greater than 2,000,000 Btu per hour provided that the supplemental heat used is 90,000 therms per year or less.
- (~~9~~14) HEAT INPUT means the higher heating value of the fuel to the unit measured as Btu/hr.
- (~~10~~15) HEPA means High Efficiency Particulate Air filter which is capable of trapping and retaining at least 99.97 percent of all monodispersed particles of 0.3 micrometer in diameter or larger.
- (16) INTERNAL COMBUSTION ENGINE is any spark or compression ignited reciprocating internal combustion engine used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius, has a manufacturer's rating of 100 brake horsepower or less, and is fired exclusively on diesel #2 fuel.
- (~~14~~17) ISOLATED WORK AREA means the immediate enclosed containment area in which the asbestos abatement activity takes place.
- (18) MICRO-TURBINE is a stationary gas turbine engine, with a rated maximum heat input capacity of 3,500,000 Btu per hour or less, provided

that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of *installation* manufacture with the state of California or were in operation prior to May 3, 2013.

(~~12~~19) NEGATIVE AIR MACHINE means a machine or contrivance whose primary use is to remove asbestos emissions from residential or commercial abatement projects by passing asbestos containing air from an isolated work area by means of negative air pressure to a HEPA filtration system.

(~~13~~20) OIL PRODUCTION WELL GROUP is no more than four well pumps located at a facility subject to Rule 1148.1 – Oil and Gas Production Wells at which crude petroleum production and handling are conducted, as defined in the Standard Industrial Classification Manual as Industry No. 1311, Crude Petroleum and Natural Gas.

(21) PORTABLE DIESEL FUELED HEATER is any combustion equipment which transfers heat from the combustion process for space heating and is designed to be fired exclusively with diesel #2 fuel and has a rated maximum heat input capacity of 250,000 Btu per hour or less.

(22) POWER PRESSURE WASHER AND HOT WATER OR STEAM WASHER AND CLEANER is any equipment equipped with a heater or burner that is designed to be fired on diesel fuel, has a rated maximum heat input capacity of 550,000 Btu per hour or less, is equipped with a non-resettable chronometer, has a maximum NOx emission output of less than one pound per day and uses no more than 50 gallons of fuel per day.

(~~14~~23) PROCESS HEATER means any combustion equipment fired with or designed to be fired with natural gas and which transfers heat from combustion gases to water or process streams. Process Heater does not include any kiln or oven used for annealing, drying, curing, baking, cooking, calcining, or vitrifying; or any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment.

(~~15~~24) RATED HEAT INPUT CAPACITY means the gross rated heat input specified on the nameplate of the combustion device.

(25) STORAGE OF ODORANTS FOR NATURAL GAS, PROPANE, OR OIL is equipment used exclusively for the storage of odorants for natural gas,

propane, or oil odorant storage, with a holding capacity of less than 950 liters (251 gallons) and associated transfer and control equipment.

(26) TAR POT (also known as a tar kettle) is any mobile equipment used exclusively for the storage, holding, melting, and transfer of asphalt or coal tar pitch and has a maximum holding capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and is equipped with burner(s) that fire exclusively on liquefied petroleum gases.

~~(4627)~~ WELL CELLAR is a lined or unlined containment surrounding one or more oil wells, allowing access to the wellhead components for servicing and/or installation of blowout prevention equipment.

~~(4728)~~ WELLHEAD is an assembly of valves mounted to the casing head of an oil well through which a well is produced. The wellhead is connected to an oil production line and in some cases to a gas casing.

~~(4829)~~ WELL PUMP is a pump used to bring crude oil from the subsurface to surface. A well pump is connected to a well head and can be located in or above a well cellar.

(d) Requirements

(1) Owners/operators of sources subject to this rule shall:

(A) comply with all applicable District, state, and federal rules and regulations;

(B) comply with all operating conditions imposed as specified by the District on the a new emissions source or equipment filing;

(BC) submit applicable information for each emissions source described in this rule to the District, in a format determined by the Executive Officer, which shall provides a description of the source, including and shall include all associated air pollution control equipment, sufficient any and all pertinent data as necessary to estimate emissions from the source, and to determine a determination that the emission source or equipment meets all compliance requirements with applicable rules and regulations. For change of location or change of owner/operator, a new emission source or equipment filing is shall be required prior to operation of the emission source or equipment. This information shall include, if applicable, but not be limited to:

(i) hours of operation;

- (ii) materials used or processed;
- (iii) fuel usage;
- (iv) throughput; and
- (v) operating parameters.

~~(CD)~~ ~~upon request, periodically submit updated information in the format specified by the Executive Officer for the applicable emission source category;~~On May 3, 2013, and each subsequent January 1 thereafter, records shall be kept and made available to the District upon request to provide operation data and any updated information on the emission sources or equipment, applicable to this rule, including, but not limited to:

- (i) hours of operation;
- (ii) materials used or processed;
- (iii) fuel usage;
- (iv) throughput; and
- (v) operating parameters.

~~(DE)~~ pay all required fees pursuant to Rule 301;

~~(EF)~~ maintain a copy on-site of the filing receipt for ~~the all~~ emission sources and equipment applicable to this rule for the life of the emission sources or equipment and make available made available to or as otherwise approved in writing by the Executive Officer upon request;

~~(FG)~~ maintain ~~sufficient~~ records sufficient to verify the description of the emission sources or equipment, subject to this rule, all of emission source, data necessary to estimate emissions output of emissions sources, and records information used to determine compliance with applicable rules and regulations as specified by the Executive Officer demonstrate compliance with operating conditions and with all other applicable rules and regulations. The records shall be maintained for five (5) years and made available to the Executive Officer upon request;

~~(GH)~~ not remove any air pollution control equipment associated with applicable equipment described in this rule ~~and installed prior to September 11, 1998, unless it is to~~can be demonstrated that the replacement be replaced with air pollution control equipment ~~which~~ will reduce emissions at equal to or greater efficiency than

the prior unit and such replacement air pollution control equipment is first approved in writing by the Executive Officer.

- (2) Owners and/or operators of agricultural sources subject to this rule shall comply with the registration requirements in the CARB ATCM for stationary diesel-fueled agricultural engines rated at greater than 50 brake horsepower pursuant to California Code of Regulations, Title 17, Sections 93115.3(a) and 93115.8(c).

(3) Failure to comply with the provisions set forth in subparagraphs (d)(1)(A), (B), (C), (D), (E), and (F) shall constitute a violation of this rule.

(e) Compliance Dates

- (1) A person shall not install, alter, replace, operate, or use any equipment subject to this rule, initially installed on or after the- effective date in Table I, without first complying with the requirements in subparagraphs (d)(1)(A), (B), ~~(D)~~, (E) and ~~(G)~~(H).
- (2) The owner/operator of an emission source installed prior to the effective date in Table I and not currently possessing a valid Permit to Operate or open application for a Permit to Operate shall comply with the requirements of subdivision (d) within six (6) months of the effective date in Table I.
- (3) The owner/operator of an emission source installed prior to the effective date in Table I and possessing a valid Permit to Operate or open application for a Permit to Operate will be notified by the Executive Officer of the transfer of the Permit to Operate or open application to the filing system and shall comply with the requirements of subdivision (d) within sixty (60) days of notification.

(4) Failure to comply with the provision set forth in paragraphs (b)(1), (b)(2), (e)(1) through (e)(3) shall constitute a violation of this rule.

ATTACHMENT G

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

FINAL STAFF REPORT

Proposed Amended Rule 219 –Equipment Not Requiring A Written Permit Pursuant To Regulation II,

Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring A Written Permit Pursuant To Regulation II

May 2013

Deputy Executive Officer,

Planning, Rule Development, and Area Sources,
Elaine Chang, Dr.PH

Assistant Deputy Executive Officer,

Planning, Rule Development, and Area Sources,
Laki Tisopulos, Ph.D., P.E.

Planning and Rules Manager,

Planning, Rule Development, and Area Sources,
Naveen Berry

AUTHOR:

Don Hopps

AQ Specialist

REVIEWED BY:

Robert Pease

Program Supervisor

Lauren Nevitt

Deputy District Counsel II

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD

CHAIRMAN: DR. WILLIAM A. BURKE
Speaker of the Assembly Appointee

VICE CHAIRMAN: DENNIS YATES
Mayor, Chino
Cities of San Bernardino

MEMBERS: MICHAEL D. ANTONOVICH
Supervisor, Fifth District
County of Los Angeles

BEN BENOIT
Councilmember, Wildomar
Cities of Riverside County

JOHN J. BENOIT
Supervisor, Fourth District
County of Riverside

MICHAEL A. CACCIOTTI
Councilmember, South Pasadena
Cities of Los Angeles County/Eastern Region

JOSIE GONZALES
Supervisor, Fifth District
County of San Bernardino

JOSEPH K. LYOU, Ph. D.
Governor's Appointee

JUDITH MITCHELL
Mayor Pro Tem, Rolling Hills Estates
Cities of Los Angeles County/Western Region

SHAWN NELSON
Supervisor, Fourth District
County of Orange

DR. CLARK E. PARKER, SR.
Senate Rules Appointee

JAN PERRY
Councilmember, 9th District
City of Los Angeles Representative

MIGUEL A. PULIDO
Mayor, Santa Ana
Cities of Orange County

EXECUTIVE OFFICER: BARRY R. WALLERSTEIN, D.ENV.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY	ES-1
-------------------------	------

CHAPTER 1 – BACKGROUND ON PROPOSED AMENDED RULE 219

INTRODUCTION	1-1
REGULATORY HISTORY	1-1
AFFECTED FACILITIES	1-1

CHAPTER 2: SUMMARY OF PROPOSED AMENDED RULE 219

OVERVIEW: PROPOSED AMENDMENTS TO RULE 219	2-1
ASPHALT PAVEMENT HEATERS	2-2
ICES USED REMOTE TWO-WAY TRANSMISSION TOWERS, CAPACITY AND NOX EMISSION OUTPUT	2-2
MICRO-TURBINES, CAPACITY AND STATE-CERTIFIED	2-3
DIESEL FUELED BOILERS, CAPACITY AND NOX EMISSION OUTPUT	2-4
FOOD OVENS, CAPACITY AND NOX EMISSION OUTPUT	2-4
PORTABLE DIESEL FUELED HEATERS, CAPACITY AND NOX EMISSION OUTPUT	2-5
POWER PRESSURE WASHERS, CAPACITY AND NOX EMISSION OUTPUT	2-6
FUEL CELLS, CLARIFY EXEMPTION	2-6
LASER CUTTING, ETCHING AND ENGRAVING EQUIPMENT AND ASSOCIATED CONTROLS	2-7
CHARBROILERS, FOR NON-COMMERCIAL MULTI-FAMILY RESIDENTIAL USE	2-8
COSMETIC FILLING STATIONS AND RELATED FILLING EQUIPMENT	2-8
STORAGE OF ODORANTS FOR NATURAL GAS, PROPANE OR OIL	2-8
TAR POTS (A.K.A. TAR KETTLES)	2-9
ASPHALT DAY TANKERS	2-10
CARPET SHEARING MACHINES AND ASSOCIATED CONTROLS	2-10
AEROSOL CAN RECYCLING SYSTEMS	2-11
REVISIONS TO EXISTING RULE LANGUAGE	2-12 2-11
ADDITIONAL ADMINISTRATIVE CHANGES	2-18

CHAPTER 3 – BACKGROUND ON PROPOSED AMENDED RULE 222

INTRODUCTION	3-1
REGULATORY HISTORY	3-1
AFFECTED FACILITIES	3-1

CHAPTER 4: SUMMARY OF PROPOSED AMENDED RULE 222

OVERVIEW: PROPOSED AMENDMENTS TO RULE 222	4-1
ASPHALT DAY TANKERS	4-2
ASPHALT PAVEMENT HEATERS	4-3
DIESEL FUEL BOILERS	4-3
FOOD OVENS	4-4
FUEL CELLS	4-4
ICES USED REMOTE TWO-WAY TRANSMISSION TOWERS	4-5
MICRO-TURBINES	4-6
PORTABLE DIESEL FUELED HEATERS	4-7 4-11

TABLE OF CONTENTS

POWER PRESSURE WASHERS	4-97
STORAGE FOR ODORANTS FOR NATURAL GAS, PROPANE OR OIL	4-108
TAR POTS	4-119
REVISIONS TO EXISTING RULE LANGUAGE	4-110
ADDITIONAL ADMINISTRATIVE CHANGES	4-113

CHAPTER 5: IMPACT ASSESSMENT OF PROPOSED AMENDED RULES 219 & 222

INTRODUCTION	5-1
EMISSION IMPACT ASSESSMENT	5-1
SAMPLE CALCULATION, USING PORTABLE POWER PRESSURE WASHERS & ICE	5-3
COST ANALYSIS	5-5
INCREMENTAL COST-EFFECTIVENESS	5-7
CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)	5-7
SOCIOECONOMIC IMPACT ASSESSMENT	5-7
DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE 40727	5-10
COMPARATIVE ANALYSIS	5-11
DRAFT CONCLUSIONS AND RECOMMENDATIONS	5-11
PUBLIC COMMENTS AND RESPONSES	5-11

REFERENCES	R-1
------------------	------------

LIST OF TABLES

TABLE 1 - EMISSION SOURCES COMPATIBLE WITH AQMD RULE 222 FILING PROGRAM	3-2
TABLE 2 - PROPOSED EMISSION SOURCES TO BE INCLUDED IN THE RULE 222 FILING PROGRAM	4-151 <u>13</u>
TABLE 3 - SUGGESTED USAGE ADJUSTMENTS	5-3
TABLE 4 - EMISSION IMPACT ASSESSMENT	5-4
TABLE 5 - COMPARISON OF PERMITTED FEES AND PROPOSED REGISTRATION FEES	5-6
TABLE 6 – FEE IMPACT BY INDUSTRY	5-8
TABLE 7 – FEE IMPACT BY EQUIPMENT CATEGORY	5-9
TABLE 8 – FEE IMPACT OF PROPOSED AMENDMENTS AND CEQA ALTERNATIVES	5-10

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Rule 219 and 222 are linked rules that demark the lower threshold of the written permit system. Equipment not requiring a written permit under AQMD Regulation II is either exempt pursuant to Rule 219 or subject to a simplified filing process under Rule 222. Staff is proposing amendments to these rules that will expand the list of equipment covered by these rules; thereby simplifying and streamlining the administration of the permit system. Proposed amendments to Rule 222 enhance the enforceability of the conditions imposed by the filing as well as expand the appeal rights of the holders of the filings. Through these provisions, filings for facilities subject to Rule 222 will function independent of a permit, resulting in reduced fees.

Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit to Operate Pursuant to Regulation II – is an administrative rule that provides certain equipment that emit small amounts of air contaminants an exemption from District permitting requirements under Regulation II - Permits. This staff proposal seeks to include additional equipment for exemption and clarify some existing rule language on the intent of the existing exemptions.

Staff proposes to exempt the following sixteen equipment categories with small criteria pollutant and toxic emission profiles and limited potential for further reductions from permitting requirements:

- Asphalt pavement heaters (a)(5);
- ICEs, remote 2-way radio transmission towers, capacity and NOx output (b)(1);
- Micro-turbines, capacity and state-certified (b)(1);
- Diesel fueled boilers, capacity and NOx emission output (b)(2);
- Food Ovens, capacity and NOx emission output (b)(2);
- Portable diesel fueled heaters, capacity and NOx output (b)(3)
- Power pressure washers, capacity and NOx emission output (b)(4);
- Fuel Cells, clarification of exemption (b)(5);
- Laser cutting, etching and engraving equipment and associated controls (e)(8);
- Charbroilers, non-commercial multi-family residential use (i)(12);
- Cosmetic filling stations and related filling equipment (k)(5);
- Storage of odorants for natural gas, propane, or oil (m)(9);
- Tar pots or tar kettles(m)(11);
- Asphalt day tankers (m)(23);
- Carpet shearing machines and associated controls (p)(10); and
- Aerosol can recycling systems (p)(22).

Approximately one half of equipment categories proposed for exemption from written permits is currently subject to Rule 1147 as a result of their current permit status. Staff's review of the state of the control technology to date indicates a limited potential for developing feasible controls for these categories by the future effective dates of Rule 1147. Given the limited potential for further controls and their low criteria and toxic emissions profile, staff is

recommending their exemption from written permits, which would also relieve them from the obligation to comply with Rule 1147.

Additionally, staff intends to make revisions to some paragraphs of the current rule language to clarify the intent of the existing exemptions and also include minor clarifications and editorial corrections to the rule.

Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit to Operate Pursuant to Regulation II – provides a simplified filing process in lieu of permitting for certain equipment that have a low emissions profile. The proposed amendments to Rule 222 will require operators of some equipment proposed for exemption under Proposed Amended Rule 219 and some other equipment categories to file their information in the AQMD Rule 222 filing program in lieu of their written permits. While Rule 222 provides the owners/operators of certain equipment with a simplified filing process at much reduced cost compared to written permits, it also provides the District with the ability to track the operation, location of such equipment and their relative contribution to the emissions inventory; as well provide simplified operating conditions.

This proposed amendment for Rule 222 is designed to add the following equipment categories to the Rule 222 filing program:

- Asphalt Day Tankers, with a maximum holding capacity greater than 600 liters (159 gallons) but no more than 18,925 liters (5,000 gallons) and are equipped with a demister and burner(s) that are designed to fire exclusively on liquefied petroleum gases;
- Asphalt Pavement Heaters used for road maintenance and new road construction;
- Diesel Fueled Boilers, that have a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fueled exclusively with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland, and have been in operation prior to May 3, 2013;
- Food Ovens, with a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fired exclusively on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day;
- Fuel Cells, which produce electricity in an electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies and associated heating equipment, including heaters that have a rated maximum heat input capacity of greater than 2,000,000 Btu per hour, provided that the supplemental heat used is 90,000 therms per year or less;
- Internal combustion engines used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius, has a manufacturer's rating of 100 brake horsepower or less and are fired exclusively on diesel #2 fuel; and

- Micro-turbines, with a rated maximum heat input capacity of 3,500,000 Btu per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation manufacture with the state of California or were in operation prior to May 3, 2013;
- Portable Diesel Fueled Heaters, with a rated maximum heat input capacity of 250,000 Btu per hour or less and are equipped with burner(s) designed to fire exclusively on diesel #2 fuel;
- Power Pressure Washers and Hot Water or Steam Washers and Cleaners that are equipped with heaters or burners that have a rated maximum heat input capacity of 550,000 Btu per hour or less, are fueled either by natural gas, methanol, liquefied petroleum gases, or any combination thereof or diesel fuel, equipped with a non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day and uses less than 50 gallons of fuel per day;
- Storage of odorants for natural gas, propane, or oil with a holding capacity of less than 950 liters (251 gallons) and associated transfer and control equipment;
- Tar Pots or Tar Kettles, with a maximum storage capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and are equipped with burner(s) designed to fire exclusively on liquefied petroleum gases.

Additionally, staff proposes provisions that would enhance enforceability of conditions included in approval of filings and also include minor clarifications and editorial corrections to the rule.

Finally, staff is proposing to allow equipment processes and operations with low emissions profiles to be included into the streamlined program, provide the equipment owners and operators with faster turnaround service, at a lower fee, and without compromising enforceability.

RULE 219 – EQUIPMENT NOT REQUIRING A WRITTEN PERMIT PURSUANT TO REGULATION II

CHAPTER 1: BACKGROUND ON PROPOSED AMENDED RULE 219

- o Introduction
- o Regulatory History
- o Affected Facilities

INTRODUCTION

Rule 219 – Equipment Not Requiring A Written Permit Pursuant To Regulation II - is an administrative rule that identifies equipment, processes, or operations that emit small amounts of air contaminants that shall not require written permits, unless such equipment, process or operation is subject to subdivision (s) - Exceptions. In addition, an exemption from a written permit requirement provided by this rule is only applicable if the equipment, process, or operation is in compliance with subdivision (t) - recordkeeping.

REGULATORY HISTORY

Rule 219 was adopted on January 9, 1976 and subsequently has been amended seventeen times; this proposed amendment will be the eighteenth amendment to the rule. The most recent amendment was on June 1, 2007.

AFFECTED INDUSTRIES

Rule 219 affects any industry that uses equipment, processes, or operations that produce small amounts of air contaminants by providing an exemption to written permit for such equipment. These types of equipment, processes, or operations that emit small amounts of air contaminants can be small business operations or large source operations.

RULE 219 –

EQUIPMENT NOT REQUIRING A WRITTEN PERMIT PURSUANT TO REGULATION II

CHAPTER 2: SUMMARY OF PROPOSED AMENDED RULE 219

- OVERVIEW: PROPOSED AMENDMENT TO RULE 219
 - Asphalt pavement heaters (a)(5);
 - ICEs, remote 2-way radio transmission towers, capacity and NOx output (b)(1);
 - Micro-turbines, capacity and state-certified (b)(1);
 - Diesel fueled boilers, capacity and NOx emission output (b)(2);
 - Food Ovens, capacity and NOx output (b)(2);
 - Portable diesel fueled heaters, capacity and NOx output (b)(3)
 - Power pressure washers, capacity and NOx emission output (b)(4);
 - Fuel Cells, clarification of exemption (b)(5);
 - Laser cutting, etching and engraving equipment and associated controls (e)(8);
 - Charbroilers, for non-commercial multi-family residential use (i)(12);
 - Cosmetic filling stations and related filling equipment (k)(5);
 - Storage of odorants for natural gas, propane, or oil (m)(9);
 - Tar pots (aka Tar kettles) (m)(11);
 - Asphalt day tankers (m)(23);
 - Carpet shearing machines and associated controls (p)(10); and
 - Aerosol can recycling systems (p)(22);
- REVISIONS TO EXISTING RULE LANGUAGE
- ADDITIONAL ADMINISTRATIVE CHANGES

OVERVIEW: PROPOSED AMENDMENT TO RULE 219

Proposed Amended Rule (PAR) 219 – Equipment Not Requiring A Written Permit Pursuant To Regulation II - is an administrative rule that provides certain equipment, processes, and operations that emit small amounts of air contaminants an exemption from the District permitting requirements under Regulation II - Permits. Staff has identified additional sources of equipment, processes, and operations that emit small amounts of air contaminants that are being proposed to be included in Rule 219. The emissions are further limited using parameters such as maximum fuel usage or hours of operation, and maintain potential risks below one in a million. This staff proposal seeks to include the following additional equipment, processes, or operations for exemption:

- Asphalt pavement heaters used for road maintenance and new road construction (a)(5);
- Internal combustion engines used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius, has a manufacturer's rating of 100 brake horsepower or less and are fired exclusively on diesel #2 fuel (b)(1); Micro-turbines, with a rated maximum heat input capacity of 3,500,000 British thermal units (Btu) per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of ~~installation~~ manufacture with the state of California or were in operation prior to May 3, 2013 (b)(1);
- Diesel fueled boilers, that have a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fueled exclusively with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland, and where the maximum NOx emission output of the equipment is less than one pound per day and uses less than 50 gallons of fuel per day, and have been in operation prior to May 3, 2013 (b)(2);
- Food ovens, with a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fired exclusively on natural gas, and where the VOC emissions from yeast fermentation are less than one pound per day (b)(2);
- Portable diesel fueled heaters, with a rated maximum heat input capacity of 250,000 Btu/hour or less, and are equipped with burner(s) designed to be fired exclusively on diesel fuel (b)(3);
- Power washers and hot water steam washers and cleaners, that are equipped with a heater or burner that is fueled either by natural gas, methanol, liquefied petroleum gases, or any combination thereof or diesel fuel, with a rated maximum heat input capacity of ~~500,000~~ 550,000 Btu per hour or less, equipped with a non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day, and uses no more than 50 gallons of fuel per day (b)(4);
- Fuel cells, which use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies ; and associated heating equipment, including heaters that have a

rated maximum heat input capacity greater than 2,000,000 Btu per hour, provided that the supplemental heat used is 90,000 therms per year or less (b)(5);

- Laser cutting, etching, and engraving equipment and associated controls (e)(8);
- Charbroilers, for non-commercial multi-family residential use (i)(12);
- Cosmetic filling stations and related filling equipment (k)(5);
- Storage of odorants for natural gas, propane, or oil (m)(9);
- Tar Pots (aka Tar Kettles) (m)(11);
- Asphalt day tankers (m)(23);
- Carpet shearing machines and associated controls (p)(10); and
- Aerosol can recycling systems (p)(22).

Additionally, staff intends to make minor revisions to some paragraphs of the current rule language and include clarifications and editorial corrections to the rule.

Asphalt pavement heaters {219(a)(5)}

Staff has identified 2 permitted asphalt pavement heaters that are currently operating in the South Coast Air Basin. The proposed amendments to Rule 219 include an additional paragraph to exempt the 2 asphalt pavement heaters which would then make them eligible to be transitioned from a written permit to a more streamlined Rule 222 filing. The current rule language in Rule 219 subdivision (a) is as follows: *“This subdivision does not apply to air contaminant emitting equipment which is mounted and operated on motor vehicles, marine vessels, mobile hazardous material treatment systems, mobile day tankers [except those carrying solely fuel oil with an organic vapor pressure of 5 mm Hg (0.1 psi) absolute or less at 21.1 °C (70 °F)], or pavement heating machines.”*

Staff proposes to include an additional paragraph, paragraph (a)(5), to subdivision (a) as follows: *“Asphalt pavement heaters (which are any mobile equipment used for the purposes of road maintenance and new road construction) provided a filing pursuant to Rule 222 is submitted to the Executive Officer.”* In addition, staff proposes to delete “pavement heating machines” in last paragraph of Rule 219 subdivision (a) as follows: *“This subdivision does not apply to air contaminant emitting equipment which is mounted and operated on motor vehicles, marine vessels, mobile hazardous material treatment systems, mobile day tankers [except those carrying solely fuel oil with an organic vapor pressure of 5 mm Hg (0.1 psi) absolute or less at 21.1 °C (70 °F)], ~~or pavement heating machines.~~”*

ICEs operating at remote two-way radio transmission towers {219(b)(1)}

Staff has identified 16 internal combustion engines that are currently operating at 8 two-way radio transmission towers in the South Coast Air Basin. Each radio transition tower employs two of these engines and they run offset, meaning that one runs for 12 hours and shuts down while the other starts up and runs for 12 hours for an accumulated run time of 24 hours, 7 days per week, 52 weeks per year. All 16 units are solely diesel fueled and are operating in ~~r-remote-ural~~

remote rural areas where there are no provisions for natural gas, electricity or alternate fuels. By adding these units to Rule 219, staff calculated a best estimate for the daily NOx emissions that would not be reduced through the future effective emission limitation requirements of Rule 1110.2 as 56.04 pounds of NOx per day. The remote location of these units is unlikely to result in any health risk from diesel emissions of greater than one in one million.

The proposed amendments to Rule 219 paragraph (b)(1) seek to exempt the 16 internal combustion engines used at two-way radio transmission towers which would then make them eligible to be transitioned into the more streamlined Rule 222 filing program. Staff is proposing new rule language, in part, to 219 paragraph (b)(1) as follows: “or internal combustion engines, used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius, with a manufacturer’s rating of 100 brake horsepower or less, and are fired exclusively on diesel #2 fuel.”

Micro-turbines {219(b)(1)}

Staff has identified 16 permitted micro-turbines that are currently operating in the South Coast Air Basin. The proposed amendments to Rule 219 paragraph (b)(1) seek to exempt the 16 micro-turbines which would then make them eligible to be transitioned into the more streamlined Rule 222 filing program. All 16 micro-turbines are fueled by landfill gases and staff estimates that the inclusion of the 16 micro-turbines in the Rule 222 filing program will not have any impact on emissions as these units subject to the proposed rule will be required to meet the state of California distributed generation standard which is at or below BACT levels. Staff learned from a manufacturer of micro-turbines that new 3,500,000 Btu per hour micro-turbines operated with a more favorable emissions profile than the older 2,975,000 Btu per hour. Increasing the Btu per hour limit for this proposed exemption would alleviate this inequity. Staff will additionally propose to limit the power generation capacity for the micro-turbines at a combined two megawatts which serves as a constraint for the maximum power generation capacity that a combined set of micro-turbines could produce. Additionally, staff proposes a requirement for the micro-turbines, that they either be certified at the time of ~~installation~~ manufacture with the state of California or were in operation prior to the date of adoption. Staff recognizes that there will be no emissions forgone as a result of proposed amendment to the micro-turbines.

The current rule language in Rule 219 paragraph (b)(1) states: *“Piston type internal combustion engines with a manufacturer's rating of 50 brake horsepower or less, or gas turbine engines with a maximum heat input rate of 2,975,000 British thermal units (Btu) per hour or less.”* Staff is proposing to revise the current rule language, in part, with the following proposed language: “or stationary gas turbine engines, including micro-turbines, with a rated maximum heat input ~~rate~~ capacity of 2,975,000 3,500,000 British thermal units (Btu) per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of ~~installation~~ manufacture with the state of California or were in operation prior to May 3, 2013 provided a filing pursuant to Rule 222 is submitted to the

Executive Officer.” To ensure that already installed, existing micro-turbines are not adversely impacted in anyway by the revised exemption, the amendment includes language to grandfather existing installations.

Staff’s proposed language for paragraph (b)(1), in its entirety, is as follows: “Internal combustion engines with a manufacturer’s rating of 50 brake horsepower or less; or internal combustion engines, used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius; with a manufacturer’s rating of 100 brake horsepower or less, and are fired exclusively on diesel #2 fuel; or stationary gas turbine engines, including micro-turbines, with a rated maximum heat input ~~rate~~ capacity of 2,975,000 3,500,000 British thermal units (Btu) per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of ~~installation~~ manufacture with the state of California or were in operation prior to May 3, 2013.”

Diesel fueled boilers, capacity and NOx emission output {219(b)(2)}

Staff has identified 5 permitted diesel fueled boilers and is proposing to exempt this equipment and then transition it into the Rule 222 filing program. The new rule language proposed to exempt these 5 diesel fueled boilers is, in part as follows: “Boilers, process heaters, or any combustion equipment that has a ~~rated~~ maximum heat input ~~rate~~ capacity of 2,000,000 Btu per hour (gross) or less and ~~is~~ are equipped to be heated exclusively with, natural gas, methanol, liquefied petroleum gas, or any combination thereof; or diesel fueled boilers, that have a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fueled exclusively with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland, and where the maximum NOx emission output of the equipment is less than one pound per day and uses less than 50 gallons of fuel per day, and have been in operation prior to May 3, 2013 provided a filing pursuant to Rule 222 is submitted to the Executive Officer. This exemption does not apply to internal combustion engines or turbines. Since these units will no longer be subject to the future effective NOx limits of Rule 1147, staff calculated a best estimate for the daily NOx emissions forgone as 0.30 pounds of NOx per day. The remote locations of these diesel fueled boilers result in a risk below one in a million.

Food ovens, capacity and yeast {219(b)(2)}

Staff has identified 55 permitted food ovens and is proposing to exempt these ovens providing they meet certain criteria such as a rated maximum heat input capacity of 2,000,000 Btu/hours or less, must be fired exclusively on natural gas, and the VOCs from yeast fermentation must be one pound per day or less, and then transition these ovens to the more streamlined Rule 222 filing program. Staff is proposing to add additional rule language to paragraph (b)(2) to include food ovens as follows: “except for food ovens that have a rated maximum heat input capacity of 2,000,000 Btu/hour or less and are exclusively fired on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day provided a filing pursuant to

Rule 222 is submitted to the Executive Officer.” As those units would no longer be subject to Rule 1147 requirements, staff calculated a best conservative estimate for the daily NOx emissions forgone as 23.86 pounds of NOx per day; staff will continue to refine this estimate based on the availability of additional data.

Staff’s proposed language for paragraph (b)(1), in its entirety, is as follows: “Boilers, process heaters, or any combustion equipment that has a rated maximum heat input ~~rate~~ capacity of 2,000,000 Btu per hour (gross) or less and ~~is~~ are equipped to be heated exclusively with, natural gas, methanol, liquefied petroleum gas, or any combination thereof; or diesel fueled boilers, that have a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fueled exclusively with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland, and where the maximum NOx emission output of the equipment is less than one pound per day and uses less than 50 gallons of fuel per day, and have been in operation prior to ~~{Date of Adoption}~~ May 3, 2013 provided a filing pursuant to Rule 222 is submitted to the Executive Officer. This exemption does not ~~include~~ apply to ~~piston~~ piston-type internal combustion engines or turbines. This exemption does not apply whenever there are emissions other than products of combustion, unless the equipment is specifically exempt under another section of this rule, except for food ovens with a rated maximum heat input capacity of 2,000,000 Btu/hour or less, that are fired exclusively on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day provided a filing pursuant to Rule 222 is submitted to the Executive Officer.”

Portable Diesel Fueled Heaters {219(b)(3)}

Staff has identified 9 permitted portable diesel fueled heaters and is proposing to exempt this equipment and then transition it into the more streamlined Rule 222 filing program. Portable diesel fueled heaters are typically used in large areas where comfort heat is required but electricity and natural gas pipe lines are not available. The portable diesel fueled heaters are common and can be obtained in variety of Btu ratings.

Staff is proposing new rule language and seeks to add these portable diesel fueled heaters to Rule 219. The new proposed rule language will become a new paragraph, Rule 219 paragraph (b)(3), and will exempt these 9 permitted portable diesel fuel heaters so they can then be transitioned to the Rule 222 filing program. The rule language is as follows: “Portable diesel fueled heaters with a rated maximum heat input capacity of 250,000 Btu per hour or less and are equipped with burner(s) designed to be fired exclusively on diesel fuel only provided a filing pursuant to Rule 222 is submitted to the Executive Officer.” Staff calculated a best estimate for the daily NOx emissions forgone as 0.05 pounds of NOx per day which staff considers a small emission source. The limited size of these diesel fueled boilers with limited fuel usage means a risk below one in a million.

Power Pressure Washers and Hot Water or Steam Washers and Cleaners equipped with diesel fired burners {219(b)(4)}

Staff has identified 271 permitted power washers and hot water or steam washers and cleaners and is proposing to exempt this equipment and then transition it into the more streamlined Rule 222 filing program. Staff determined from the entire universe of power washers and hot water or steam washers and cleaners, that 96% of the 271 total units had rated maximum heat input capacities of less than 550,000 Btu per hour. In addition, staff is proposing qualification criteria for the exemption that will include a maximum allowance of one pound of NOx (oxides of nitrogen) per day which is equivalent to less than 50 gallons of fuel per day.

Staff is proposing new rule language to Rule 219 to add the power pressure washers and hot water or steam washers and cleaners. The proposed new rule language, Rule 219 paragraph (b)(4), is as follows: “Power pressure washers and hot water or steam washers and cleaners, that are equipped with a heater or a burner that is designed to be fired exclusively on diesel fuel, with a maximum rated heat input capacity of 550,000 Btu per hour or less, equipped with a non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day and uses less than 50 gallons of fuel per day provided a filing pursuant to Rule 222 is submitted to the Executive Officer. This exemption does not apply to piston-type internal combustion engines or turbines.” The new proposed rule language will exempt 261 (261 out of 271 will qualify) permitted power pressure washers and hot water or steam washers and cleaners so they can then be transitioned to the Rule 222 filing program. Since these units will no longer be subject to the future effective limits of Rule 1147, staff calculated a best estimate for the daily NOx emissions forgone as 11.89 pounds of NOx per day. The limited fuel usage requirement means the potential risk should be less than one in a million.

Further, staff recommends that each engine be fitted or retrofitted with chronometers to indicate the operation times of both the engine and the heater or burner. Finally, staff will add language to inform operators that all electrically heated heaters or burners will be considered exempt from both written permit and Rule 222 filing program.

Fuel cells, clarification of exemption {219(b)(4)}

Staff has identified 2 fuel cells that are in the process of an engineering analysis for written permit and is proposing to instead exempt this equipment and then transition it into the more streamlined Rule 222 filing program. Staff is further proposing to clarify the exemption for fuel cells based on the supplemental heater usage rate of 90,000 therms per year. Fuel cells generate power with much lower emissions profile than central power plants, even when emissions from the supplemental heater use are accounted for. In an effort to encourage the use of such distributed power generation equipment, staff is recommending to continue the exemption of such equipment, including their supplemental heaters, from permitting provided that the heater provides less than 90,000 therms per year. Staff based the 90,000 therms per year on a worst case scenario where the total NOx emissions for a start-up heater was equivalent to 30 ppm,

which is equivalent to 0.0363 lbs per 10⁶ Btu resulting in 326.7 pounds per year of NO_x emissions or less than 1 pound/day, on average.

Staff is proposing the following revised rule language: *“Fuel cells, which produce electricity in an electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies; and associated heating equipment, including heaters that have a rated maximum heat input capacity of greater than 2,000,000 Btu per hour, provided that the supplemental heat used is 90,000 therms per year or less provided a filing pursuant to Rule 222 is submitted to the Executive Officer.”* The new proposed rule language will become Rule 219 paragraph (b)(5) and will exempt the fuel cells with supplemental heaters and then transition them into the Rule 222 filing program.

Laser cutting etching and engraving equipment and associated controls {219(e)(8)}

LASER – Light Amplification by Stimulated Emission of Radiation – is a process where light energy is converted into heat energy that is focused into a point, or laser beam, which is directed onto the working surface of an object. The laser beam of a laser cutting machine melts, burns, vaporizes away or blows away the material with a jet of gas which provides a desirable high quality surface finish on materials such as flat sheet metal. There are three types of laser cutters that are used in industrial manufacturing applications:

1. The CO₂ laser is used to cut, bore, and engrave materials such as mild steel, aluminum, stainless steel, titanium, paper, wax, plastics, wood, and fabrics.
2. The neodymium (Nd) laser provides high-energy pulsing low repetition speeds and is typically used for boring.
3. The neodymium yttrium-aluminum-garnet (Nd-YAG) laser, which provides very high-energy pulsing and is used for boring, engraving, and trimming operations.

Laser etching or engraving equipment is commonly used on metals, plastics, wood, and any other surface that can be etched or engraved. The laser beam etches or engraves by heating up the surface of the object so that the surface of the material will either vaporize or surface fracture resulting in the desired engraving on the surface of the object. Staff has observed several industries that use laser etching or engraving in place of the more conventional mechanical etching and engraving. The laser etching or engraving equipment is offered in many sizes, based on maximum power output, with many of the units being very small and thus a small emissions source. The emissions inventory for 31 permitted laser engravers and etchers shows 3.0 pounds per day of particulate matter, less than 10 microns (PM₁₀). In addition, the 5 permitted laser cutters shows 1.9 pounds per day of PM₁₀ and combined, laser cutters, engravers and etchers account for 4.9 pounds of PM₁₀ per day. These 36 laser cutters, engravers and etchers do not process certain metals such as stainless steel, or alloyed materials that contain chromium, cadmium, nickel or lead; these metals when subjected to the intense heat of the laser flash off

toxic materials. Lasers that process these type metals must go through a complete engineering evaluation before a written permit is considered.

Staff is proposing to exempt a subset of laser cutting machines and laser etching and engraving machines from written permit by providing an exemption in Rule 219 paragraph (e)(8) provided they meet certain criteria. The exemption would be based on a 400 watts maximum power output and the type of working surface material. Staff is proposing to modify the current rule language in Rule 219 paragraph (e)(8) to include laser cutting and laser etching and engraving as follows: “Welding equipment, ~~or~~ oxygen gaseous fuel-cutting equipment laser etching equipment, engraving of metal equipment and associated control equipment. This exemption does not include plasma arc-cutting equipment or laser cutting equipment that is used to cut stainless steel or alloys containing chromium, nickel, cadmium or lead, or laser cutters that are rated more than ~~136 amperes or more~~ 400 watts and control equipment venting such equipment.”

Charbroilers for non-commercial multi-family residential units {219(i)(12)}

Staff is proposing to clarify the rule language regarding use of charbroiling equipment in multi-family residential areas. The proposed new language is as follows: “Charbroilers in multi-family residential units only if used by owner or occupant of such dwelling for non-commercial purposes.” Staff does not anticipate any additional cumulative emissions with this revision.

Cosmetic Filling Stations and Related Filling Equipment {219(k)(5)}

Staff is proposing to exempt cosmetics filling stations where the filling equipment is hard piped to the cosmetics mixer or the holding tank feeding the filling equipment provided the mixer and holding tank are exempt by Rule 219. Staff is proposing new language to address cosmetic filling stations and related filling equipment. The new language proposed for Rule 219 paragraph (k)(5) is as follows: “Cosmetics filling stations where the filling equipment is hard piped to the cosmetics mixer or the holding tank feeding the filling equipment provided that the mixer and holding tank are exempt under this rule.” Staff does not anticipate any additional cumulative emissions with this revision.

Storage of Odorants for Natural Gas, Propane, or Oil {219 (m)(9)}

Staff has observed odorant storage tanks at multiple public utility natural gas transfer facilities. Officials from the public utilities informed staff that the Department of Transportation (DOT) regulations require that natural gas be odorized before it's transferred to end users. The larger facilities typically have 1,000 and 1,500 gallon odorant storage tanks, which are permitted with SCAQMD but there are several facilities that have smaller odorant storage tanks. Currently, one facility has a 120 gallon capacity odorant storage tank whereas sixteen other facilities have 60 gallon capacity odorant storage tanks. The storage tanks contain a blend of 50% tertiary-butyl mercaptan & 50% tetrahydrothiophene which is the product used for the odorant. The odorant storage tanks are topped off with odorant every other year and the odorant is typically dispensed

into the gas line at a rate of 7 pounds per million cubic feet (7 lbs/mmft³). Staff has determined that the smaller odorant tanks would be viable candidates for exemption in Proposed Amended Rule 219 which would then be transitioned into the Rule 222 filing program.

Staff proposes to provide an exemption in Proposed Amended Rule 219 for the smaller odorant storage tanks which will include one 120-gallon odorant storage tank and sixteen 60-gallon odorant storage tanks and the associated transfer and control equipment. This equipment will then be transitioned to the more streamlined Rule 222 filing program along with any appropriate operating conditions. The revised rule language for Rule 219 paragraph (m)(9) is as follows: *“Equipment used exclusively for VOC containing liquid storage or transfer to and from such storage, of less than 950 liters (251 gallons) capacity ~~and~~ or equipment used exclusively for storage of odorants for natural gas, propane, or oil of less than 950 liters (251 gallons) capacity and associated transfer and control equipment used exclusively for such equipment provided a filing pursuant to Rule 222 is submitted to the Executive Officer. This exemption does not include asphalt.”*

Tar Pots (also known as Tar Kettles) {219(m)(11)}

Tar Pots, also commonly known as tar kettles, are used in roofing construction and repair operations, from residential single-family homes to apartment buildings and office buildings. The purpose of the tar pot is two-fold, one to transport a volume of tar to a jobsite and two, to melt the asphalt or coal tar pitch using the equipment onboard burner that directs heat to the tar continuously to melt the tar and keep it in a molten state. Roofing contractors need to keep the tar in a molten state so it can be removed from the tar pot and directly applied to the working surface. Tar pots normally range in maximum holding capacities and can range from 100 gallons up to 1,000 gallons. The burners for the tar pots are fired on various fuels such as liquefied petroleum gases and diesel based fuels which typically produce maximum heat input capacities from 38,000 BTU/hour up to 2,400,000 Btu/hour.

Staff is proposing to revise the current rule language (m)(11) for tar pots by increasing the maximum holding capacity from less than 600 liters (159 gallons) to less than 3,785 liters (1,000 gallons) and then transition several tar pots with written permits to the more streamlined Rule 222 filing program. Staff proposes to add new rule language that would exempt tar pots that have less than 3,785 liters holding capacity as follows: *“Equipment, including tar pots (or tar kettles), used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch with a maximum holding capacity of less than 600 liters (159 gallons); or equipment, including tar pots (or tar kettles) used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch with a maximum holding capacity of no more than 3,785 liters (1,000 gallons), is equipped with burner(s) designed to fire exclusively on liquefied petroleum gases only provided a filing pursuant to Rule 222 is submitted to the Executive Officer.”* Staff does not anticipate any additional cumulative emissions with this revision.

Asphalt Day Tankers {219(m)(23)}

Asphalt day tankers are also used in roofing construction and repair operations, from residential single-family homes to apartment buildings, office buildings and large industrial buildings. The purpose of the day tanker is two-fold, one to transport a volume of tar to a jobsite and two, to melt the asphalt or coal tar pitch using the equipment onboard burner that directs heat to the tar continuously to melt the tar and keep it in a molten state. Roofing contractors need to keep the tar in a molten state so it can be dispensed from the asphalt day tanker and then directly applied to the working surface. Asphalt day tankers normally have holding capacities from 830 gallons and can be as large as 25,000 gallons and have burner(s) that have rated maximum heat input capacities of 100,000 to 1,400,000 Btu per hour. The burners for the asphalt day tankers are fired on various fuels such as liquefied petroleum gases and diesel based fuels.

Staff has identified 72 permitted asphalt day tankers from the District data base and seeks to exempt 58 of these type units that meet the proposed exemption criteria so they can be transitioned to the more streamlined Rule 222 filing program. Staff proposes to add an additional paragraph, Rule 219 Paragraph (m)(23), to the Storage and Transfer Equipment subdivision of Rule 219 which will contain new rule language as follows: “Equipment, including asphalt day tankers, used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch, is mounted on a motor vehicle, with a maximum holding capacity of less than 600 liters (159 gallons); or equipment, including asphalt day tankers, used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch, that is mounted on a motor vehicle, with a maximum holding capacity of no more than 18,925 liters (5,000 gallons), is equipped with burner(s) designed to fire exclusively on liquefied petroleum gases only provided a filing pursuant to Rule 222 is submitted to the Executive Officer.” Staff does not anticipate any additional cumulative emissions with this revision.

Carpet Shearing Machines and Associated Control Equipment {219(p)(10)}

Staff is proposing to clarify carpet shearing machines and associated control equipment to be exempt pursuant to Rule 219 subdivision (p), Miscellaneous Process Equipment. Staff has determined that the material produced from carpet shearing operations is too large to be considered dust. This equipment is being proposed to be exempt based on data showing that the material size processed from the shearing operations is larger than PM₁₀ and therefore, is not considered to be dust by staff. Staff does not anticipate any additional cumulative emissions with this revision.

Staff proposes to add a new equipment category to the existing rule language, Rule 219 paragraph (p)(10), c for arpet shearing and associated control equipment, as follows: “Paper shredding, carpet and paper shearing ~~and~~ as well as associated conveying systems, baling equipment, and control equipment venting such equipment.”

Aerosol Can Recycling Systems {219(p)(22)}

Aerosol paint cans and aerosol solvent cans, such as engine degreasers, brake cleaners, and electrical component cleaners, are very popular and convenient sources for small painting and repair operations and where an application of solvent is desired. Both aerosol type cans are frequently used in plants as well as out in field to perform routine maintenance and repair operations for various types of equipment. These aerosol cans, typically in sizes from 12 fluid ounces to approximately 18 fluid ounces, are convenient for workers to carry, which has promoted their popularity in industrial uses. When the aerosol cans have spent their product, the worker typically disposes the empty can in a common refuse container. However, the spent aerosol cans still retain a small amount of residual paint or solvent and propellant inside and presents an environmental concern when the empty can is disposed of.

Several facilities have been using the Aerosolv Aerosol Can Disposal Recycling System to recycle the remaining product left inside the empty aerosol can. The Aerosolv recycling system has two components, the press and the filter, and these two components are installed onto a common 30 to 55 gallon drum container lid. The press simply threads into the two-inch bung fitting whereas the filter threads into the ¾ inch bung fitting. The filter contains an activated carbon canister that adsorbs the VOCs that would otherwise emit from the drum to atmosphere. The press is used by an operator who places an aerosol can in the sleeve of the press by first inverting the aerosol can so the spray head points downward in the sleeve. The securing clamp is then adjusted to secure the aerosol can firmly, and then the operator pushes down on the lever which then drives a punch pin into the dome area of the aerosol can thus allowing the remaining product to discharge inside the drum. The depressurized aerosol can is then stockpiled for metal recycling. The Aerosolv Aerosol Can Disposal Recycling System is the only aerosol can recycling technology of its type and is certified by the U.S. EPA's Environmental Technology Verification Program. This program is described by the U.S. EPA as a "*Program [that] verifies the performance of innovative technologies that have the potential to improve protection of human health and the environment.*" Staff is proposing to add new rule language to the Miscellaneous Process Equipment subdivision of Rule 219, to exempt this equipment from written permit. The new proposed rule language for Rule 219 paragraph (p)(22) is as follows: "Equipment used to recycle aerosol cans by puncturing the can in an enclosed system which is vented through an activated carbon filter. This exemption shall only apply to aerosol recycling systems where the aerosol can to be recycled was used as part of their operation at the facility or from facilities under common ownership." Staff does not anticipate any additional cumulative emissions with this revision.

REVISIONS TO EXISTING RULE LANGUAGE

Staff is proposing several revisions to the current rule language in Rule 219 for purposes of clarifying the intent of the existing rule language.

Revisions to paragraph {219(a)(4)}

The current rule language for Rule 219 paragraph (a)(4) includes pavement heating machines but staff proposes to move the pavement heating machines to the Rule 222 filing program. Staff proposes to add an additional paragraph, paragraph (a)(5), to the existing rule language for the asphalt pavement heaters and require a Rule 222 filing, and then delete “or pavement heating machines” from the last paragraph of subdivision (a). Staff proposes the new rule language as follows: *“Asphalt pavement heaters (which are any mobile equipment used for the purposes of road maintenance and new road construction) provided a filing pursuant to Rule 222 is submitted to the Executive Officer.”* and the existing language, last paragraph, will be as follows *“This subdivision does not apply to air contaminant emitting equipment which is mounted and operated on motor vehicles, marine vessels, mobile hazardous material treatment systems, mobile day tankers [except those carrying solely fuel oil with an organic vapor pressure of 5 mm Hg (0.1 psi) absolute or less at 21.1 °C (70 °F)], ~~or pavement heating machines~~ provided a filing pursuant to Rule 222 is submitted to the Executive Officer.”* Staff does not anticipate any additional cumulative emissions with this revision.

Revisions to paragraph {219(d)(10)}

Staff has had several meetings with local city and county agencies in regard to the use of passive carbon adsorption systems that are used to control hydrogen sulfide (H₂S) odors at wastewater treatment plants. Staff proposes to make revisions to the rule to allow an exemption for these systems.

Staff proposes the following revision to include H₂S odor control at wastewater treatment plants: *“Passive carbon adsorbers, with a maximum vessel capacity of no more than 120 gallons, ~~using~~ ~~no~~ ~~without~~ mechanical ventilation ~~with a volume of 55 gallons or less~~, used exclusively for ~~foul~~ ~~air~~ odor control ~~from~~ ~~at~~ ~~wastewater treatment plants or sanitary sewer collection systems,~~ including ~~such as~~ sanitary sewers lines, manholes and pump stations”*. Staff does not anticipate any additional cumulative emissions with this revision.

Revisions to paragraph {219 (e)(2)}

Staff proposes to revise the language in Rule 219 paragraph (e)(2) to clarify that control equipment for crucible-type or pot-type furnaces are included in the exemption. In addition, staff will clarify subparagraph (e)(2)(G) by changing the word “Glass” to “Ceramic material, including glass and porcelain.” The revised rule language is as follows: *“Crucible furnaces, pot furnaces, or induction furnaces with a capacity of 450 kilograms (992 pounds) or less each, and control equipment used to exclusively vent the equipment where no sweating or distilling is conducted and where only the following materials are poured or held in a molten state ~~and control equipment exclusively venting the equipment~~:*

(A) Aluminum or any alloy containing over 50 percent aluminum,

- (B) *Magnesium or any alloy containing over 50 percent magnesium,*
- (C) *Tin or any alloy containing over 50 percent tin,*
- (D) *Zinc or any alloy containing over 50 percent zinc,*
- (E) *Copper or any alloy containing over 50 percent copper,*
- (F) *Precious metals, and*
- (G) *~~Glass~~ Ceramic materials, including glass and porcelain.*

Revisions to paragraph {219 (e)(3)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (e)(3) as follows: “*Molds used for the casting of metals and control equipment used to exclusively ~~venting~~ the equipment.*”

Revisions to paragraph {219 (e)(4)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (e)(4) as follows: “*Inspection equipment used exclusively for metal, plastic, glass, or ceramic products and control equipment used to ~~venting~~ exclusively vent such equipment.*”

Revisions to paragraph {219 (e)(10)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (e)(10) as follows: “*Mold forming equipment for foundry sand to which no heat is applied, and where no volatile organic materials are used in the process, and control equipment used to exclusively ~~venting~~ such equipment.*”

Revisions to paragraph {219 (e)(17)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (e)(17) as follows: “*Wax burnout kilns where the total internal volume is less than 0.2 cubic meter (7.0 cubic feet) or kilns used exclusively for firing ceramic ware, provided such kilns are exempt pursuant to paragraph (b)(2) and control equipment used to exclusively ~~venting~~ the equipment.*”

Revisions to paragraph {219 (e)(20)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (e)(20) as follows: “*Vacuum metallizing chambers which are electrically heated or heated with equipment that is exempt pursuant to paragraph (b)(2), and control equipment used to exclusively ~~venting~~ such equipment, provided the control equipment is equipped with a mist eliminator or the vacuum pump used with control equipment demonstrates operation with no visible emissions from the vacuum exhaust.*”

Revisions to paragraph {219 (f)(1)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (f)(1) as follows: “*Blast cleaning cabinets in which a suspension of abrasive in water is used and control equipment used to exclusively ~~venting~~ such equipment.*”

Revisions to paragraph {219 (f)(4)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (f)(4) as follows: “*Shot peening operations, flywheel type and control equipment used to exclusively venting such equipment.*”

Revisions to paragraph {219 (f)(5)}

Staff proposes to clarify the rule language in Rule 219 paragraph (f)(5) as follows: “*Portable sand/water blaster equipment and associated ~~piston~~ piston-type internal combustion engine provided the water in the mixture is 66 percent or more by volume is maintained during operation of such equipment. ~~Piston~~ Piston-type internal combustion engines must be exempt pursuant to paragraph (b)(1).*”

Revisions to paragraph {219 (g)(1)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (f)(1) as follows: “*Equipment used exclusively for buffing (except tire buffers), polishing, carving, mechanical cutting, drilling, machining, pressing, routing, sanding, stamping, surface grinding or turning provided that any lubricants, coolants, or cutting oils used have 50 grams or less of VOC per liter of material or a VOC composite partial pressure of 20 mm Hg or less at 20 °C (68 °F) and control equipment used to exclusively venting such equipment. This exemption does not include asphalt pavement grinders.*”

Revisions to paragraph {219 (g)(2)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (f)(1) as follows: “*Equipment used exclusively for shredding of wood, or the extruding, handling, or storage of wood chips, sawdust, or wood shavings and control equipment used to exclusively venting such equipment. This exemption does not include ~~piston~~ piston-type internal combustion engines over 50 bhp, which are used to supply power to such equipment.*”

Revisions to paragraph {219 (h)(1)}

Staff proposes to add new language to Rule 219 paragraph (h)(1) to include any associated air pollution control equipment to the rule language for the subject equipment described in the rule language. Therefore, staff is proposing to add new language to the existing paragraph as follows: “*Printing and related coating and/or laminating equipment and associated dryers and curing equipment, as well as associated air pollution control equipment, provided such dryers and curing equipment are exempt pursuant to paragraph (b)(2), and air pollution control equipment is not required for source specific rule compliance and provided that:” and then leads into subparagraphs (A) through (E). Staff does not anticipate any additional cumulative emissions with this revision.*

Revisions to paragraph {219 (h)(7)}

Staff proposes to add new language to Rule 219 paragraph (h)(7) to include any associated air pollution control equipment to the rule language for the subject equipment described in the rule language. Therefore, staff is proposing to add new language to the existing paragraph as follows: *“Hand application of materials used in printing operations including but not limited to the use of squeegees, screens, stamps, stencils, ~~and~~ any hand tools and associated air pollution control equipment exclusively venting the hand application of materials in printing operations unless such air pollution control equipment is required for source specific rule compliance.”* Staff does not anticipate any additional cumulative emissions with this revision.

Revisions to paragraph {219 (i)(4)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (i)(4) as follows: *“Grinding, blending, or packaging equipment used exclusively for tea, cocoa, roasted coffee, flavor, fragrance extraction, dried flowers, or spices, provided that the facility uses less than one gallon per day or twenty-two (22) gallons per month of VOC containing solvents, and control equipment used to exclusively venting such equipment.”*

Revisions to paragraph {219 (i)(7)}

Staff proposes to clarify the rule language in Rule 219 paragraph (i)(7) as follows: *“Cooking kettles where ~~all the~~ the entire product in the kettle is edible and intended for human consumption. This exemption does not include deep frying equipment used in facilities other than eating establishments.”*

Revisions to paragraph {219 (i)(8)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (i)(8) as follows: *“Coffee roasting equipment with a maximum capacity of 10 pounds or less and control equipment used to exclusively venting the equipment.”*

Revisions to paragraphs {219(i)(9) & 219(i)(10)}

Staff proposes to add waterborne solutions to the current rule language providing that the waterborne solutions contain no more than 25 grams per liter of VOC. The 25 grams per liter limit is consistent with the Districts solvent rules such as Rule 1143 – Consumer Paint Thinners and Multi-Purpose Solvents and Rule 1171 – Solvent Cleaning Operations. Staff also proposes to change the word “facility” to “equipment.”

The revised language for paragraph (i)(9) will be as follows: *“Equipment used exclusively for tableting, or packaging vitamins, or coating vitamins, herbs, or dietary supplements provided that the facility equipment uses waterborne solutions that have a maximum VOC content of no more than 25 grams per liter, or the facility uses less than one gallon per day or twenty-two (22)”*

gallons per month, of VOC containing solvents, and control equipment used exclusively to vent such equipment.”

The revised language for paragraph (i)(10) will be as follows: *“Equipment used exclusively for tableting or packaging pharmaceuticals and cosmetics, or coating pharmaceutical tablets, provided that the ~~facility~~ equipment uses waterborne solutions that have a maximum VOC content of no more than 25 grams per liter, or the facility uses less than one gallon per day or twenty-two (22) gallons per month, of VOC containing solvents; and control equipment used exclusively to vent such equipment.”* Staff does not anticipate any additional cumulative emissions with this revision.

Revisions to paragraph {219 (j)(6)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (j)(6) as follows: *“Injection or blow molding equipment for rubber or plastics where no blowing agent other than compressed air, water or carbon dioxide is used, and control equipment used to exclusively venting such equipment.”*

Revisions to paragraph {219 (k)(1)}

Staff proposes to clarify the existing rule language for Rule 219 paragraph (k)(1) by adding the associated filling equipment in addition to the existing batch mixing equipment, which was the original intent at the time the initial exemption was crafted. Therefore, staff is proposing to modify the existing rule language to the existing paragraph as follows: *“Batch mixers which have a brimful capacity of 55 gallons or less (7.35 cubic feet) and control equipment used exclusively to vent the equipment and associated filling equipment.”* Staff does not anticipate any additional cumulative emissions with this revision.

Revisions to paragraph {219 (k)(2)}

Staff proposes to clarify the existing rule language for Rule 219 paragraph (k)(2) by adding the associated filling equipment in addition to the existing batch mixing equipment, which was the initial intent at the time the original exemption was crafted. Therefore, staff is proposing to modify the existing rule language to the existing paragraph which would then state: *“Equipment used to exclusively for mixing and blending of materials where no VOC containing solvents are used and no materials in powder form are added and associated filling equipment.”* Staff does not anticipate any additional cumulative emissions with this revision.

Revisions to paragraph {219 (k)(4)}

Staff proposes to modify the current rule language in Rule 219 paragraph (k)(4) to provide an exemption to equipment where powders may be added to equipment that is used to blend, grind and mix or thin liquids that have a maximum capacity of 251 gallons or less. Therefore, staff is proposing to modify the existing rule language to the existing paragraph as follows: *“Equipment used to blend, grind, mix, or thin liquids to which powders ~~are~~ may be added, with a capacity of*

950 liters (251 gallons) or less, where no supplemental heat is added and no ingredient charged (excluding water) exceeds 135 °F and control equipment exclusively venting the equipment.” Staff does not anticipate any additional cumulative emissions with this revision.

Revisions to paragraph {219 (k)(6)}

Staff proposes to clarify the rule language for control equipment in Rule 219 paragraph (k)(6) as follows: “Concrete mixers, with a rated working capacity of one cubic yard or less and control equipment used exclusively to venting the equipment.”

Revisions to paragraph {219 (k)(8)}

Staff proposes to modify the current rule language in Rule 219 paragraph (k)(8) to provide for one minor editorial correction. The term “hypochlorite-based” requires a hyphen between the words. The second time the term hypochlorite-based is used it was missing the hyphen. The revised rule language is proposed as follows: “Equipment used exclusively for the packaging of sodium hypochlorite-based household cleaning or sodium hypochlorite-based pool products and control equipment used exclusively to venting the equipment.” Staff does not anticipate any additional cumulative emissions with this revision.

Revisions to paragraph {219 (l)(6)}

Staff is proposing to include “air brush” to the coating application descriptive list in this paragraph of the rule. The proposed revised rule language is as follows: “Coating or adhesive application or laminating equipment such as air, airless, air-assisted airless, high volume low pressure (HVLP), air brushes, ~~and~~ electrostatic spray equipment, ~~and~~ roller coaters, dip coaters, vacuum coaters, flow coaters and spray machines provided that:” and then leads into subparagraphs (a) through (F). Staff does not anticipate any additional cumulative emissions with this revision.

Revisions to paragraph {219 (l)(8)}

Staff proposes to clarify the rule language in Rule 219 paragraph (l)(8) as follows: “Control enclosures with an internal volume of 27 cubic feet or less, provided that aerosol cans, air brushes, or hand applications ~~work~~ are used exclusively.”

Revision to paragraph {219 (m)(7)}

Staff proposes to include additional language in Rule 219 paragraph (m)(7) to include air pollution control equipment used to exclusively vent such equipment to the rule. Therefore, staff is proposing the following revision: “Equipment used exclusively for the storage and transfer of refined lubricating or hydraulic oils and control equipment used to exclusively vent such equipment.”

Revision to paragraph {219 (m)(8)}

Staff proposes to include additional language Rule 219 paragraph (m)(8) to include air pollution control equipment used to exclusively vent such equipment to the rule. Therefore, staff is proposing the following revision: “*Equipment used exclusively for the storage and transfer of crankcase drainage oil and control equipment used to exclusively vent such equipment.*”

Revisions to paragraph {219 (m)(22)}

Staff proposes to make the rule language in Rule 219 paragraph (m)(22) to be consistent with other rule language in the rule as follows: “*Unheated equipment including associated control equipment used exclusively for the storage and transfer of fluorosilicic acid at a concentration of 30% or less by weight and a vapor pressure of 24 mm Hg or less at 77 °F ~~degrees Fahrenheit~~ (25 °C ~~degrees Celsius~~). The hydrofluoric acid concentration within the fluorosilicic acid solution shall not exceed 1% by weight.*”

Revisions to paragraph {219(o)(4)}

Staff proposes to include new rule language in Rule 219 paragraph (o)(4) to clarify the intent of the exemption by including any associated air pollution control equipment used to exclusively vent such equipment to the rule. Therefore, staff is proposing the following revision: “*Hand application of solvents for cleaning purposes including but not limited to the use of rags, daubers, swabs and squeeze bottles as well as associated air pollution control equipment unless air pollution control equipment is required for source specific rule compliance.*” Staff does not anticipate any additional cumulative emissions with this revision.

Revisions to paragraph {219 (p)(19)}

Staff proposes to make the rule language in Rule 219 paragraph (p)(19) to be consistent with other rule language in the rule as follows: “*Foam application equipment using ~~two~~ two- component polyurethane foam where no VOC containing blowing agent is used, excluding chlorofluorocarbons or methylene chloride, and control equipment exclusively venting this equipment.*”

Revisions to subdivision {219 (s)}

Staff proposes to clarify the rule language in Rule 219 subdivision (s), in part, as follows: “*Notwithstanding equipment identified in (a) through (r) of this rule, written permits are required pursuant to paragraphs (s)(1) and (s)(2) and filings are required under Rule 222 pursuant to paragraph (s)(3).*”

ADDITIONAL ADMINISTRATIVE CHANGES

Additionally, staff intends to make minor revisions to some paragraphs of the current rule language and include clarifications and editorial corrections to the rule.

RULE 222 –

**FILING REQUIREMENTS FOR SPECIFIC EMISSION SOURCES NOT REQUIRING A
WRITTEN PERMIT PURSUANT TO REGULATION II**

CHAPTER 3: BACKGROUND ON PROPOSED AMENDED RULE 222

- o Introduction
- o Regulatory History
- o Affected Facilities

INTRODUCTION

Rule 222 - Filing Requirements for Specific Emission Sources Not Requiring A Written Permit Pursuant To Regulation II - provides an alternative to District written permits by allowing certain emission sources that meet predetermined criteria to register the emission source in the Rule 222 filing program. These emission sources, shown in Table 1, are the significantly smaller emitters and less complex sources. These sources do not require a written permit but are required to meet the filing requirements pursuant to the Rule 222 filing program and are subject to operating conditions. The filing of these emission sources is typically accompanied by pre-established operating conditions, which limit unnecessary or excessive air contaminants. Additionally, the benefit to the District administration is the simplicity and efficiency in processing the application for the emission sources in the Rule 222 filing program rather than as a traditional written permit, which typically includes permit pre-screening, permit analysis, and permit evaluation before the permit to construct and permit to operate can be issued. In addition, the filing of such equipment allows the District to accurately account for their emissions which is quite useful in determining the emissions inventories for the respective source categories. The benefit to the owner and operator will be the faster turnaround time for processing and the reduced cost compared to a typical written permit.

The current rule requires owners and operators of specific emission sources to submit information regarding emissions, including, but not limited to; (1) a description of the emission source; (2) data necessary to estimate emissions from the emission source; and (3) information to determine whether the emission source is operating in compliance with applicable District, state, and federal rules and regulations.

REGULATORY HISTORY

Rule 222 was adopted on September 11, 1998 and has subsequently been amended three times; this proposed amendment will be the fourth amendment to the rule. The most recent amendment was on December 5, 2008.

AFFECTED INDUSTRIES

Rule 222 applies to owners and operators of emission sources that meet specific criteria to qualify for the District Rule 222 filing program and any equipment that would be otherwise exempt from a written permit pursuant to Rule 219 but was determined by the Executive Officer that it could not operate in compliance with applicable rules and regulations.

TABLE 1 – EMISSION SOURCES COMPATIBLE WITH THE AQMD RULE 222 FILING PROGRAM

SOURCE/EQUIPMENT	EFFECTIVE DATE
Boilers or Steam Generators & Process Heaters with a rated heat input capacity from 1,000,000 up to and including 2,000,000 Btu/hr, excluding equipment subject to Regulation XX – Regional Clean Air Incentives Market (RECLAIM)	1/1/2001
Commercial Charbroilers and associated air pollution control equipment	1/1/1999
Negative Air Machines (Asbestos)	1/1/1999
Oil Production Well Group	1/1/2004
Printing and related coating and/or laminating equipment and associated dryers and curing equipment exempt from written permit pursuant to Rule 219(h)(1)(E)	12/5/2008
Roller to roller coating systems that create 3-dimensional images exempt from written permit pursuant to Rule 219(j)(13)(C)	12/5/2008
Coating or adhesive application, or laminating equipment exempt from written permit pursuant to Rule 219(l)(6)(F)	12/5/2008
Drying equipment such as flash-off ovens, drying ovens, or curing ovens associated with coating or adhesive application, or laminating equipment exempt from written permit pursuant to Rule 219(l)(11)(F)	12/5/2008
Agricultural Diesel-Fueled Engines rated greater than 50 brake horse power used in Agricultural Operations exempt from written permit pursuant to Rule 219(q)(1) and (q)(2), and subject to CARB ATCM	12/5/2008
Equipment, processes, or operations located at a facility holding no written permit and emitting four tons or more of VOCs per year as specified in Rule 219(s)(3)	12/5/2008
Gasoline storage tanks and dispensing equipment with capacity greater than or equal to 251 gallons, and installed on or before July 7, 2006 at agricultural operations	12/5/2008

RULE 222 –

FILING REQUIREMENTS FOR SPECIFIC EMISSION SOURCES NOT REQUIRING A WRITTEN PERMIT PURSUANT TO REGULATION II

CHAPTER 4: SUMMARY OF PROPOSED AMENDED RULE 222

- o Overview: Proposed Amendment To Rule 222
- o Asphalt Day Tankers
- o Asphalt Pavement Heaters
- o Diesel Fueled Boilers
- o Food Ovens
- o Fuel Cells
- o ICEs used at remote Two-Way Radio Transmission Towers
- o Micro-Turbines
- o Portable Diesel Fueled Heaters
- o Power Pressure Washers And Hot Water Steam Washers And Cleaners
- o Storage of Odorants for Natural Gas, Propane or Oil
- o Tar Pots (a.k.a. Tar Kettles)

OVERVIEW: PROPOSED AMENDMENT TO RULE 222

The purpose of this amendment is to require specific emission sources that currently have written District permits to instead file their information for such equipment under the Rule 222 filing program. The Rule 222 filing program is designed for small emitting sources and any exempt emission sources under Rule 219 that cannot operate in compliance as determined by the Executive Officer. Based on a careful evaluation of their emission characteristics, staff is proposing to add the following equipment categories to the AQMD Rule 222 filing program:

- Asphalt Day Tankers, with a maximum holding capacity greater than 600 liters (159 gallons) but no more than 18,925 liters (5,000 gallons) and are equipped with a demister and burner(s) that are designed to fire exclusively on liquefied petroleum gases;
- Asphalt Pavement Heaters used for road maintenance and new road construction;
- Diesel Fueled Boilers, that have a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fueled exclusively with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland, and have been in operation prior to May 3, 2013;
- Food Ovens, with a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fired exclusively on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day;
- Fuel Cells, which produce electricity in an electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies; and associated heating equipment, including heaters that have a rated heat input capacity of greater than 2,000,000 Btu per hour, provided that the supplemental heat used is 90,000 therms per year or less;
- Internal combustion engines used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius, has a manufacturer's rating of 100 brake horsepower or less, and are fired exclusively on diesel #2 fuel;
- Micro-turbines, with a rated maximum heat input capacity of 3,500,000 Btu per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation manufacture with the state of California or were in operation prior to May 3, 2013;
- Portable Diesel Fueled Heaters, with a rated heat input capacity of 250,000 Btu per hour or less and are equipped with burner(s) designed to fire exclusively on diesel #2 fuel only;
- Power Pressure Washers and Hot Water Steam Washers and Cleaners, that are equipped with a heater or burner that is designed to be fired on diesel fuel, has a rated maximum heat input capacity of 550,000 Btu per hour or less, is equipped with a non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day and uses no more than 50 gallons of fuel per day;

- Storage of odorants for natural gas, propane, and oil with a holding capacity of less than 950 liters (251 gallons) and associated transfer and control equipment; and
- Tar Pots or Tar Kettles, with a maximum storage capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and are equipped with burner(s) designed to fire exclusively on liquefied petroleum gases.

Additionally, staff intends to enhance enforceability of the operating conditions included in the Rule 222 filings and include minor clarifications and editorial corrections to the rule.

The following includes the proposed definitions and descriptions for the additional sources proposed to be added to Rule 222:

ASPHALT DAY TANKERS (New equipment to be added to the Rule 222 Filing Program)

Staff is proposing to add the following definition to Rule 222:

ASPHALT DAY TANKER – is a storage tank mounted on a motor vehicle and is used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch with a maximum holding capacity greater than 600 liters (159 gallons) but no more than 18,925 liters (5,000 gallons), is equipped with a demister and burner(s) designed to fire exclusively on liquefied petroleum gases only.

Asphalt day tankers are used in roofing construction and repair operations, from residential single-family homes to apartment buildings and office buildings. The purpose of the asphalt day tanker is two-fold, one to transport a large volume of tar to a jobsite and two, to melt the asphalt or coal tar pitch using the equipments onboard burner that directs heat to the tar continuously to first melt the tar and then keep it in a molten state. Roofing contractors need to keep the tar in a molten state so it can be dispensed from the asphalt day tanker and be directly applied to the working surface.

The District database revealed 72 asphalt day tankers that are currently permitted with the District. Staff determined the maximum holding capacities for the asphalt day tankers to be from 830 to 25,000 gallons and the rated maximum heat input capacities to be from 100,000 to 1,400,000 Btu per hour. The database also revealed that 13 permitted units exceed the 5,000 gallons threshold and one permitted unit does not qualify because it uses diesel fuel. Staff is proposing to limit the capacity of the asphalt day tankers to 18,925 liters (5,000 gallons) but greater than 600 liters (159 gallons) and to limit the type of fuel that can be used to fire the burner(s) to liquefied petroleum gases only. Using these constraints, staff reduced the number of asphalt day tankers eligible for the Rule 222 filing program to 58 permitted units. Staff is proposing to add these 58 permitted asphalt day tankers to the Rule 222 filing program by adding new rule language to Table 1 of Rule 222. The proposed new rule language is as follows: “Asphalt Day Tankers, with a maximum capacity greater than 600 liters (159 gallons) but no

more than 18,925 liters (5,000 gallons) and are equipped with a demister and burner(s) that are designed to fire exclusively on liquefied petroleum gases.” As these units will no longer be subject to the future effective limits of Rule 1147, staff has calculated the best estimate for daily NOx emissions forgone for the 58 permitted asphalt day tankers to be 9.82 pounds per day. Asphalt day tankers are small emission sources and have low risks of less than one in a million.

ASPHALT PAVEMENT HEATERS (New equipment to be added to the Rule 222 Filing Program)

Staff is proposing to add the following definition:

ASPHALT PAVEMENT HEATER - is any mobile equipment used to heat asphalt or coal tar pitch for purposes of road maintenance or new road construction.

The District database revealed 2 asphalt pavement heaters. that are currently permitted with the District One asphalt pavement heater has a rated maximum heat input capacity of 180,000 Btu/hour, with kerosene-fired burners, and the other has a rated maximum heat input capacity of 660,938 Btu/hour, with propane-fired burners. Asphalt pavement heaters are mobile equipment and are used by road construction personnel to heat asphalt or coal tar pitch for purposes of road maintenance or new road construction operations. Staff is proposing to add the 2 asphalt pavement heaters to the Rule 222 filing program by adding new rule language to Table 1 of Rule 222. The proposed new rule language is as follows: “*Asphalt Pavement Heaters used for road maintenance and new road construction.*” Asphalt pavement heaters have been determined to be small emission sources and have low risks of less than one in a million. Staff does not estimate any emission changes from this addition.

DIESEL FUELED BOILERS (New equipment to be added to the Rule 222 Filing Program)

Staff is proposing to add the following definition to Rule 222:

DIESEL FUELED BOILER – is any boiler that has a rated maximum heat input capacity of 2,000,000 Btu per hour or less, is fueled exclusively with diesel #2 fuel, and is located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland and have been in operation prior to May 3, 2013.

The District database revealed 5 diesel-fired boilers with a rated maximum heat input capacity of 2,000,000 Btu/hour or less that are currently permitted to operate in the District. Rule 219 paragraph (b)(1) already provides boilers with a rated maximum heat input capacity of less than 2,000,000 Btu per hour or less and are exclusively fired on natural gas, methanol, liquid petroleum gas (LPG) an exemption from permit. Staff is proposing to add these 5 diesel fired boilers to the Rule 222 filing program in lieu of their current written permits requirement by adding new rule language to Table 1 of Rule 222. The new language is as follows: “*Diesel Fueled Boilers that have a rated maximum heat input capacity of 2,000,000 Btu per hour or less,*

are fueled exclusively with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland and have been in operation prior to May 3, 2013.” As these units will no longer be subject to the future effective limits of Rule 1147, staff calculated the best estimate for daily NOx emissions forgone for these 5 diesel fueled boilers to be 0.74 pounds per day. The 5 diesel fueled boilers are small emission sources and have low risks of less than one in a million based on their remote locations.

FOOD OVENS (New equipment to be added to the Rule 222 Filing Program)

Staff is proposing to add the following definition to Rule 222:

FOOD OVEN – is any equipment used exclusively for food preparation, has a rated maximum heat input capacity of no more than 2,000,000 Btu per hour or less, and is exclusively fired on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day.

The District database reveals 55 food ovens that have a rated maximum heat input capacity of 2,000,000 Btu/hour or less that are currently permitted to operate in the District. Typically, food ovens with a rated maximum heat input capacity of 2,000,000 Btu/hour or less are considered exempt pursuant to Rule 219 paragraph (b)(2) which states : “*Boilers, process heaters or any combustion equipment that has a maximum heat input rate of 2,000,000 Btu per hour (gross) or less and is equipped to be heated exclusively with, natural gas, methanol, liquefied petroleum gas or any combination thereof that does not include piston-type internal combustion engines. This exemption does not apply whenever there are emissions other than products of combustion, unless the equipment is specifically exempt under another section of this rule.*” However, if a food oven with a rated maximum heat input capacity of 2,000,000 Btu/hour or less is used to process food products that involve yeast, that food oven will require a written permit to operate based on the formation of ethanol emissions. Staff proposes to add the 55 food ovens to the Rule 222 filing program by adding new rule language to Table 1 of Rule 222. The proposed new rule language is as follows: “*Food Convection Ovens with a rated maximum heat input capacity of 2,000,000 Btu per hour or less are fired exclusively on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day.*” As these units will no longer be subject to the future effective limits of Rule 1147, staff has calculated the best estimate for daily NOx emissions forgone for food convection ovens to be 22.46 pounds per day.

FUEL CELLS (New equipment to be added to the Rule 222 Filing Program)

Staff is proposing to add the following definition to Rule 222:

FUEL CELL - is any equipment which produces electricity in an electro-chemical reaction and uses phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies; and associated heating equipment, including heaters that have a rated maximum

heat input capacity of greater than 2,000,000 Btu per hour provided that the supplemental heat used is 90,000 therms per year or less.

The District currently has 2 fuel cell applications pending for written permits. Both fuel cells use the molten carbonate technology and use supplemental heaters to accelerate the heat required to control the heat up phase for the carbonate bed before the fuel cells can be used to produce electrical power generation. Staff is proposing to add fuel cells that have phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies and a supplemental heater with a rated maximum heat input capacity of 90,000 therms per year or less to the Rule 222 filing program. The proposed rule language for Rule 219 paragraph (b)(5) is as follows: *“Fuel cells, which produce electricity in an electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies; and associated heating equipment, provided that the supplemental heat used is less than 90,000 therms per year or less.”* Staff is proposing to add the fuel cells to the Rule 222 filing program based on the supplemental heater usage of 90,000 therms per year or less. As there are no additional control requirements from permitting, there will be no change in emissions from this category.

ICES USED AT REMOTE TWO-WAY RADIO TRANSMISSION TOWERS (New equipment to be added to the Rule 222 Filing Program)

Staff is proposing to add the following definition:

INTERNAL COMBUSTION ENGINE is any spark or compression ignited reciprocating internal combustion engine used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius, has a manufacturer’s rating of 100 brake horsepower or less and is fired exclusively on diesel #2 fuel.

There are 8 remote two-way radio transmission towers where each facility employs 2 internal combustion engines to drive a generator to produce electricity. The 2 engines at each facility are used alternately for a combined operation of 24 hours a day, 7 days per week, and 52 weeks a year. The 8 remote two-way radio transmission towers are within the District but are in remote areas devoid of alternate fuels, liquefied petroleum gases or electrical power from a grid. The engines run on diesel fuel as this fuel source is the only viable fuel source for these remote locations. Therefore, staff is proposing to add these 16 internal combustion engines to the Rule 222 filing program, along with any applicable equipment operating conditions.

Staff is proposing to add the 16 permitted two-way radio transmission towers to the Rule 222 filing program by adding new rule language to Table 1 of Rule 222. The new proposed rule language is as follows: *“Internal combustion engines used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius, has a manufacturer’s rating of 100 brake horsepower or less, and are*

fired exclusively on diesel #2 fuel.” As these units will no longer be subject to Rule 1110.2 requirement, staff has calculated the best estimate for daily NOx emissions forgone to be 56.04 pounds per day. The 16 engines are small emission sources and have low risks of less than one in a million based on their remote location.

MICRO-TURBINES (New equipment to be added to the Rule 222 Filing Program)

Staff is proposing to add the following definition to Rule 222:

MICRO-TURBINE – is a stationary gas turbine engine, with a rated maximum heat input capacity of 3,500,000 Btu per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation manufacture with the state of California or were in operation prior to May 3, 2013.

The District database shows 16 micro-turbine engines with a rated maximum heat input capacity of 3,500,000 Btu/hour or less. The micro-turbines are significantly smaller internal combustion turbine engines when compared to conventional turbine engines, and like the conventional turbine engines they typically drive a generator which produces electrical power. The electrical power can be used by the facility or sold back to the electrical provider responsible for servicing the grid. Micro-turbines can run on a variety of fuels such as natural gas, diesel fuel, gasoline, landfill gases, and digester gases. The micro-turbines are generally grouped in numbers and a typical landfill permit, where they are most used, may show up to ten micro-turbines, each rated at 420,000 Btu/hour, using landfill gas as the fuel source and each micro-turbine driving 30 kilowatt generator. However, if the micro-turbines are using the landfill gas or digester gas as a fuel source, they require a written permit. Staff reviewed the inventory for the micro-turbines and found that there are a total of 16 micro-turbines in the inventory and all 16 micro-turbines use landfill gas as a fuel source. Staff recognizes that the micro-turbines are a small emission source and is proposing to add the micro-turbines to the Rule 222 filing program. In an effort to provide equity among different distributed energy generation sources, staff is also proposing to restrict the micro-turbines that are eligible for the Rule 222 filing program by basing eligibility on predetermined criteria.

Staff proposes to transition 16 micro-turbines to the Rule 222 filing program by adding new rule language to Table 1 of Rule 222. The new rule language is as follows: “*Micro-Turbines, with a rated maximum heat input capacity of 3,500,000 Btu per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation manufacture with the state of California or were in operation prior to May 3, 2013.*” As the control requirements are established through state certification, there are no emission changes as a result of this amendment. The 16 micro-turbines are small emission sources and have low risks of less than one in a million.

PORTABLE DIESEL FUELED HEATERS (New equipment to be added to the Rule 222 Filing Program)

Staff is proposing to add the following definition to Rule 222:

PORTABLE DIESEL FUELED HEATER - is any combustion equipment which transfers heat from the combustion process for space heating and is designed to be fired exclusively with diesel #2 fuel and has a rated maximum heat input capacity of 250,000 Btu per hour or less.

Portable diesel fueled heaters are typically used in open areas where comfort heat is required but electricity and natural gas pipe lines are not available. The portable diesel fueled heaters are common and can be obtained in variety of Btu ratings. The current District database currently shows 9 permitted portable diesel fueled heaters. Based on the review of the District database, the rated maximum heat input capacities of the 9 portable diesel fueled heaters universe ranges from 160,000 to 219,000 Btu's/hour and they are fueled with diesel fuel. The District database also shows that all 9 of these units were fired on diesel fuel.

Staff proposes to add the portable diesel fueled heaters to the Rule 222 filing program by adding new rule language to Table 1 of Rule 222. The new rule language is as follows: “*Portable Diesel Fueled Heaters, with a rated maximum heat input capacity of 250,000 Btu per hour or less and are equipped with burner(s) designed to fire exclusively on diesel #2 fuel only.*” As these units will no longer be subject to Rule 1147 requirement, staff has calculated the best estimate for daily NOx emissions forgone for portable diesel fueled heaters to be 1.08 pounds per day. The 9 portable diesel fueled heaters are small emission sources and have low risks (less than one in a million) based on their limited heat output and daily fuel usage.

POWER PRESSURE WASHERS AND HOT WATER STEAM WASHERS AND CLEANERS (New equipment to be added to the Rule 222 Filing Program)

Staff is proposing to add the following definition to Rule 222:

POWER PRESSURE WASHER AND HOT WATER OR STEAM WASHER AND CLEANER - is any equipment equipped with a heater or burner that is designed to be fired on diesel fuel, has a rated maximum heat input capacity of 550,000 Btu per hour or less, is equipped with a non-resettable chronometer, has a maximum NOx emission output of less than one pound per day and uses no more than 50 gallons of fuel per day.

Power pressure washers and hot water or steam washers and cleaners are popular for cleaning operations as they can be used to wash or steam clean machinery, buildings, pavement, and many other washing or cleaning uses that would benefit from high-pressure spray. Power pressure washers and hot water or steam washers and cleaners normally consist of a reciprocating internal combustion piston-type engine, typically fueled by gasoline, which is used to drive the compressor pump to pressurize the water into a spray or a stream. The power pressure washers

and hot water or steam washers and cleaners also employ a heater or burner that heats the water before it is dispensed from the equipment. The typical fuel used for the heater or burner is diesel #2 fuel. The power pressure washer and hot water or steam washer and cleaner equipment incorporates a rubber hose that extends from the equipment to a spray wand that is equipped with a trigger that is squeezed by the operator to discharge the pressurized spray.

The current District database currently shows 271 permitted power pressure washers and hot water or steam washers and cleaners. Based on the review of the District database, the rated maximum heat input capacities of the entire power pressure washers and hot water or steam washers and cleaners universe are from 100,000 to 1,500,000 Btu per hour and use diesel #2 fuel, kerosene, fuel oil or a combination thereof, and liquefied petroleum gases. Currently, power pressure washers and hot water or steam washers and cleaners that are equipped with a heater or burner are not exempt unless they are fired on natural gas. Since the majority of the power pressure washers that are equipped with a heater or burner do not have natural gas fired heaters or burners they do not qualify for the exemption in Rule 219 paragraph (b)(2). The current version of Rule 219 paragraph (b)(2) states: *“Boilers, process heaters or any combustion equipment that has a maximum heat input rate of 2,000,000 Btu per hour (gross) or less and is equipped to be heated exclusively with, natural gas, methanol, liquefied petroleum gas or any combination thereof that does not include piston type internal combustion engines. This exemption does not apply whenever there are emissions other than products of combustion, unless the equipment is specifically exempt under another section of this rule.”*

Staff proposes to add 261 of the 271 power pressure washers and hot water or steam washers and cleaners and have an rated heat input capacity of 550,000 Btu/hour or less to the Rule 222 filing program by adding the units to Table 1 of Rule 222. The proposed new rule language is as follows: *“Power Pressure Washers and Hot Water or Steam Washers and Cleaners, that are equipped with a heater or a burner that is designed to be fired on diesel fuel, has a rated maximum heat input capacity of 550,000 Btu per hour or less, is equipped with a non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day and uses no more than 50 gallons of fuel per day.”* As these units will no longer be subject to Rule 1147 requirement, staff has calculated the best estimate for daily NOx emissions forgone for portable power pressure washers and hot water or steam washers and cleaners to be 11.89 pounds per day. The 261 power pressure washers and hot water or steam washers and cleaners are small emission sources and have risks of less than one in a million based on limited daily fuel usage.

STORAGE OF ODORANTS FOR NATURAL GAS, PROPANE, OR OIL (New equipment to be added to the Rule 222 Filing Program)

Staff is proposing to add the following definition to Rule 222:

STORAGE OF ODORANTS FOR NATURAL GAS, PROPANE, OR OIL is equipment used exclusively for storage of odorants for natural gas, propane, or oil with a holding capacity of less than 950 liters (251 gallons) and associated transfer and control equipment.

Staff has observed odorant storage tanks at multiple public utility natural gas transfer facilities. Officials from the public utilities informed staff that the Department of Transportation (DOT) regulations require that natural gas be odorized during transfer to end users. The larger facilities typically have 1,000 and 1,500 gallon odorant storage tanks, which are permitted with SCAQMD but there are several facilities that have smaller odorant storage tanks. Currently, one facility has a 120 gallon capacity odorant storage tank whereas sixteen other facilities have 60 gallon capacity odorant storage tanks. The storage tanks contain a blend of 50% tertiary-butyl mercaptain & 50% tetrahydrothiophene which is the product used for the odorant. The odorant storage tanks are topped off with odorant every other year and the odorant is typically dispensed into the gas line at a rate of 7 pounds per million cubic feet (7 lbs/mmft³). Staff has determined that the smaller odorant tanks would be viable candidates for the Rule 222 filing program.

Staff proposes to add one 120 gallon odorant storage tank and 16 60 gallon odorant storage tanks to the Rule 222 filing program by adding new rule language that will be added to Table 1 of Rule 222. The new rule language is as follows: “*Storage of odorant for natural gas, propane, or oil with a holding capacity of less than 950 liters (251 gallons) and associated transfer and control equipment.*”

TAR POTS (a.k.a. TAR KETTLES) (New equipment to be added to the Rule 222 Filing Program)

Staff is proposing to add the following definition:

TAR POT – (also known as a tar kettle) is any mobile equipment used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch and has a maximum holding capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and is equipped with burner(s) that fire exclusively on liquefied petroleum gases only.

Tar Pots, also commonly known as tar kettles, are used in roofing construction and repair operations, from residential single-family homes to apartment buildings and office buildings. The purpose of the tar pot is two-fold, one to transport a volume of tar to a jobsite and two, to melt the asphalt or coal tar pitch using the equipments onboard burner that directs heat to the tar continuously to first melt the tar and then keep it in a molten state. Roofing contractors need to keep the tar in a molten state so it can be removed from the tar pot and be directly applied to the working surface.

The District database reveals 163 tar pots that are currently permitted and from that database staff determined that the maximum holding capacities for the asphalt day tankers tar pots to be

from 200 to 845 gallons and the rated maximum heat input capacities to be from 38,000 to 2,400,000 Btu per hour. Staff is proposing to limit the capacity of the tar pots to 3,785 liters (1,000 gallons) but more than 600 liters (159 gallons) and limit the type fuel used to fire the burner(s) to liquefied petroleum gases only. Using these constraints, staff has reduced the number of tar pots that will qualify for the Rule 222 filing program to just 148 permitted units. The database shows that 7 permitted units are under the 600 liter (159 gallons) threshold and should never have been permitted. One tar pot was disqualified from the Rule 222 filing program because it exceeded the 3,875 liters (1,000 gallons) threshold and 2 tar pots were disqualified from the Rule 222 filing program because they are diesel fired units. Staff is proposing to add 148 permitted tar pots to the Rule 222 filing program by adding these units to Table 1 of Rule 222. The proposed new rule language is as follows: “*Tar Pots, with a maximum storage capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and are equipped with burner(s) designed to fire exclusively on liquefied petroleum gases.*” As these units will no longer be subject to Rule 1147 requirement, staff has calculated the best estimate for daily NOx emissions forgone for tar pots to be 34.40 pounds per day. The tar pots are small emission sources and have low risks of less than one in a million.

REVISIONS TO EXISTING RULE LANGUAGE

Staff is proposing several revisions to the current rule language in Rule 222 for purposes of clarifying the intent of the existing rule language.

Revisions to paragraph {222 (b)(1)}

Staff is proposing additional rule language in Rule 222 paragraph (b)(1) to further clarify the requirements for the equipment as follows: “*This rule applies to owners/operators of the ~~following~~ emission sources listed in Table 1, which are exempt from written permits pursuant to Rule 219, unless the Executive Officer determines that the source cannot operate in compliance with applicable rules and regulations. This rule also applies to agricultural diesel-fueled engines subject to the California Air Resources Board Airborne Toxic Control Measure (CARB ATCM) for Stationary Compression Ignition Engines. Owners/operators authorized to operate emission sources pursuant to this rule shall operate those emissions sources in compliance with any and all operating conditions imposed by the District.*”

In addition, staff proposes additional clarity to the Boilers and Steam Generators & Process Heaters shown in table 1 with the following additional rule language: “*Boilers or Steam Generators & Process Heaters with a rated heat input capacity from 1,000,000 up to and including 2,000,000 Btu/hr and produce less than one pound of NOx emissions per day, excluding equipment subject to Regulation XX – Regional Clean Air Incentives Market (RECLAIM).*”

Revisions to paragraph {222 (b)(2)}

Staff is proposing additional rule language in Rule 222 by adding a new paragraph to clarify that if a source cannot operate in compliance a permit shall be required. The paragraph will be designated as paragraph (b)(2) and the rule language will be as follows: *“If a determination is made that the source cannot operate in compliance with applicable rules and regulations, a permit is shall be required pursuant to Rule 203.”*

Revisions to paragraph {222 (c)(10)}

Staff is proposing revisions to Rule 222 subparagraph (c)(10), which was previously denoted as paragraph (c)(7) in Rule 222, to provide clarity to the rule language. The new paragraph, which will be paragraph (c)(10) will be as follows: *“EMISSION SOURCE (SOURCE) means any equipment or process, which emits air pollutants for which ambient air quality standards have been adopted or which emits their precursor pollutants.”*

Revisions to paragraph {222 (c)(15)}

Staff is proposing revisions to Rule 222 subparagraph (c)(15), which was previously denoted as paragraph (c)(10) in Rule 222, to provide clarity to the rule language. The new paragraph, which will be paragraph (c)(15) will be as follows: *“HEPA means High Efficiency Particulate Air filter which is capable of trapping and retaining at least 99.97 percent of all monodispersed particles of 0.3 micrometer in diameter or larger.”*

Revisions to paragraph {222 (c)(25)}

Staff is proposing revisions to Rule 222 subparagraph (c)(25), which was previously denoted as paragraph (c)(15) in Rule 222, to provide clarity to the rule language. The new paragraph, which will be paragraph (c)(25) will be as follows: *“RATED HEAT INPUT CAPACITY means the gross rated heat input specified on the nameplate of the combustion device.”*

Revisions to subparagraph {222 (d)(1)(B)}

Staff is proposing new rule language in Rule 222 by adding a new paragraph to require compliance with operating conditions. The new subparagraph, which will be subparagraph (d)(1)(B) will be as follows: *“comply with all operating conditions as specified by the District on a new emission source or equipment filing.”*

Revisions to subparagraph {222 (d)(1)(D)}

Staff is proposing revisions to Rule 222 subparagraph (d)(1)(D), which was previously denoted as subparagraph (d)(1)(C) in Rule 222, with additional requirements for maintaining records. The new subparagraph, which will be subparagraph (d)(1)(D) will be as follows: *“~~upon request, periodically submit updated information in the format specified by the Executive Officer for the applicable emission source category~~—On May 3, 2013, and each subsequent January 1 thereafter, records shall be kept and made available to the District upon request to provide*

operation data and any updated information on the emission sources or equipment, applicable to this rule, including, but not limited to:

- (i) hours of operation;
- (ii) materials used or processed;
- (iii) fuel usage;
- (iv) throughput; and
- (v) operating parameters;”

Revisions to subparagraph {222 (d)(1)(E)}

Staff is proposing revisions to Rule 222 subparagraph (d)(1)(E), which was previously denoted as subparagraph (d)(1)(D) in Rule 222, by clarifying all required fees. The new subparagraph, which will be subparagraph (d)(1)(E) will be as follows: “pay *all required fees pursuant to Rule 301;*”

Revisions to subparagraph {222 (d)(1)(F)}

Staff is proposing revisions to Rule 222 subparagraph (d)(1)(F), which was previously denoted as subparagraph (d)(1)(E) in Rule 222, with additional requirements for maintaining records. The new subparagraph, which will be subparagraph (d)(1)(F) will be as follows: “maintain a copy *on-site* of the filing receipt for ~~the~~ *all* emission sources *and equipment applicable to this rule for the life of the emission sources or equipment and make available* ~~made available to or as otherwise approved in writing by the Executive Officer;~~”

Revisions to subparagraph {222 (d)(1)(G)}

Staff is proposing revisions to Rule 222 subparagraph (d)(1)(G), which was previously denoted as subparagraph (d)(1)(F) in Rule 222, with additional requirements for maintaining records. The new subparagraph, which will be subparagraph (d)(1)(G) will be as follows: “maintain ~~sufficient~~ records *sufficient to verify the description of the emission sources or equipment, subject to this rule, all of emission source, data necessary to estimate emissions output of emissions sources, and records information used to determine compliance with applicable rules and regulations as specified by the Executive Officer demonstrate compliance with operating conditions and with all other applicable rules and regulations. The records shall be maintained for five (5) years and made available to the Executive Officer upon request;*”

Revisions to subparagraph {222 (d)(1)(H)}

Staff is proposing revisions to Rule 222 subparagraph (d)(1)(H), which was previously denoted as subparagraph (d)(1)(G) in Rule 222, by clarifying the requirements for the removal of air pollution control equipment. The new subparagraph, which will be subparagraph (d)(1)(B) will be as follows: “not remove any air pollution control equipment associated with applicable equipment described in this rule unless it ~~is to~~ *can be demonstrated that the replacement be replaced with* air pollution control equipment ~~which~~ will reduce emissions at equal to or greater

efficiency than the prior unit and such replacement air pollution control equipment is first approved in writing by the Executive Officer.”

Revisions to paragraph {222 (d)(3)}

Staff is proposing new rule language in Rule 222 to provide requirements for compliance. The new paragraph, which will be paragraph (d)(3), will be as follows: *“Failure to comply with the provisions set forth in subparagraphs (d)(1)(A), (B), (C), (E), and (F) shall constitute a violation of this rule.”*

Revisions to paragraph {222 (e)(4)}

Staff is proposing new rule language in Rule 222 to provide requirements for compliance. The new paragraph, which will be paragraph (e)(4), will be as follows: *“Failure to comply with the provision set forth in paragraphs (b)(1), (b)(2), (e)(1) through (e)(3) shall constitute a violation of this rule.”*

ADDITIONAL ADMINISTRATIVE CHANGES

Other amendments included in approval of filings and also include minor clarifications and editorial corrections to the rule.

Finally, staff proposes to update Table 1 in Rule 222 by adding the above mentioned equipment. TABLE 2 - PROPOSED EMISSION SOURCES TO BE INCLUDED IN THE RULE 222 FILING PROGRAM - shows all the changes that are being proposed to be added to Table 1 in Rule 222.

TABLE 2 - PROPOSED EMISSION SOURCES TO BE INCLUDED IN THE RULE 222 FILING PROGRAM

Source/Equipment	Effective Date
Asphalt Day Tankers, with a maximum capacity greater than 600 liters (159 gallons) but no more than 18,925 liters (5,000 gallons), equipped with a demister and burner(s) that are designed to fire exclusively on liquefied petroleum gases only.	5/3/2013
Asphalt Pavement Heaters used for road maintenance and new road construction.	5/3/2013
Diesel Fueled Boilers that have a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fueled exclusively with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland and have been in operation prior to May 3, 2013.	5/3/2013
Food Ovens with a rated maximum heat input capacity of 2,000,000 Btu per hour or less are fired exclusively on natural gas and where the VOC	5/3/2013

emissions from yeast fermentation are less than one pound per day.	
Fuel Cells, which produce electricity in an electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane or solid oxide technologies; and associated heating equipment, including heaters that have a rated maximum heat input capacity of greater than 2,000,000 Btu per hour, provided that the supplemental heat used is 90,000 therms per year or less.	5/3/2013
Internal combustion engines used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius, has a manufacturer's rating of 100 brake horsepower or less, and are fired exclusively on diesel #2 fuel.	5/3/2013
Micro-Turbines, with a rated maximum heat input capacity of 3,500,000 Btu per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of <u>installation manufacture</u> with the state of California or were in operation prior to May 3, 2013.	5/3/2013
Storage of odorant for natural gas, propane, or oil of less than 950 liters (251 gallons) and associated transfer and control equipment.	
Internal combustion engines used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius, has a manufacturer's rating of 100 brake horsepower or less, and are fired exclusively on diesel #2 fuel.	5/3/2013
Portable Diesel Fueled Heaters, with a rated maximum heat input capacity of 250,000 Btu per hour or less and are equipped with burner(s) designed to fire exclusively on diesel #2 fuel only.	5/3/2013
Power Pressure Washers and Hot Water or Steam Washers and Cleaners, that are equipped with a heater or burner that is designed to be fired on diesel fuel, has a rated maximum heat input capacity of 550,000 Btu per hour or less, is equipped with non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day and uses no more than 50 gallons of fuel per day.	5/3/2013
Tar Pots with a maximum storage capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and are equipped with burner(s) designed to fire exclusively on liquefied petroleum gases only.	5/3/2013

**RULE 219 –
EQUIPMENT NOT REQUIRING A WRITTEN PERMIT PURSUANT TO REGULATION II**

**RULE 222 –
FILING REQUIREMENTS FOR SPECIFIC EMISSION SOURCES NOT REQUIRING A
WRITTEN PERMIT PURSUANT TO REGULATION II**

CHAPTER 5: IMPACT ASSESSMENT OF PROPOSED AMENDED RULES 219 & 222

- o Introduction
- o Emission Impact Assessment
- o Cost Analysis
- o Incremental Cost-Effectiveness
- o California Environmental Quality Act (CEQA)
- o Socioeconomic Impact Assessment
- o Draft Findings under California Health and Safety Code 40727
- o Comparative Analysis
- o Draft Conclusions and Recommendations
- o Public Comments and Responses

INTRODUCTION

District Rule 219 is an administrative rule that identifies equipment, processes, or operations that emit small amounts of air contaminants to be exempted from written permits, unless such equipment, process or operation is subject to subdivision (s) – Exceptions or is determined to require a written permit by the Executive Officer. The equipment categories proposed for exemption from written permits all have very small criteria and toxic emissions profile. The proposal to amend Rule 222 will allow certain specific types of equipment to transition from their current written permits to the more streamlined Rule 222 filing program. These specific types of equipment have been determined to be small emitting sources and can be streamlined from written permit to the Rule 222 filing program.

EMISSION IMPACT ASSESSMENT

Staff is proposing to move 11 categories of equipment (Asphalt Day Tankers; Asphalt Pavement Heaters; Select Diesel Fueled Boilers; Select Food Ovens; Fuel cells; Micro-turbines; Natural gas, propane and oil odorant storage; Portable Diesel Fueled Heaters; Piston-type internal combustion engines used at remote two-way transmission towers; Power Pressure Washers; and Tar Pots or Tar Kettles) from the written permit program by first exempting the eligible equipment in Rule 219 and then transitioning the equipment to the more streamlined Rule 222 filing program. Staff has determined that there is limited feasibility that these categories of equipment comply with future effective limits in Rules 1110.2 and 1147. The remote location of the Piston-type internal combustion engines used at remote two-way transmission towers and the select diesel fueled boilers prohibits the installation of the needed control equipment. The mobile nature of power pressure washers, portable diesel fueled heaters, asphalt day tankers, asphalt pavement heaters, and the tar pots make emission reductions extremely challenging. The very small emission profile produced from select food ovens precludes the installation of meaningful control.

Proposed Amended Rule 219 seeks to expand several additional categories of equipment that have de minimis emissions and transition this equipment to the more streamlined Rule 222 Filing program. These proposed amendments to both Rules 219 and 222 will facilitate the administration of the permit system while improving the operating parameters of registrations. The conversion of these sources from written permits to the Rule 222 filing program is anticipated to have a minor impact on emissions. The operating conditions required for the equipment will be equivalent to the written permit operating conditions. Further, the proposed changes to Rule 222 (b)(1) and (d)(1)(B) ensure that the filings and applicable operating conditions are enforceable, as in the written permit program.

TABLE 3 – SUGGESTED USAGE ADJUSTMENTS – shows the average firing rate, percentage of time burner is used and the average percent of units operating each day. The “*Average use per day (hours per day)*” column shows the average uses for each equipment category. Staff determined the values used in Table 3 by reviewing the District database of the applications that were submitted for each equipment category. Staff was then able to document the hours the equipment was used based on hours per day, days per week and weeks per year. Finally, staff was

then able to sum the hour/day per for each equipment category and average the usage time for each equipment category. The usage adjustments are further explained below.

The “*Average firing rate (% of maximum rating)*” column shows the average firing rate based on the percent of the maximum rating. Staff has conservatively estimated the burner turn down for each of the equipment categories and believes that these estimates represent reasonable conservative percentages of the maximum burner firing rate.

The “*Percentage of time burner fires each hour*” column shows the time each burner is actually firing during the equipments operation. The power pressure washers’ entry shows 66%, which is conservatively based on the trigger pull from the power washers spray wand. The heater or burner fires when the trigger is pulled. This information was obtained directly from the power washing industry.

The “*Average % of units operating each day*” column shows the percentage of units, per category, that are operating at a given time. The entries are based on conservative estimates by rule development staff for each of the equipment categories and staff believes that these conservative estimates represent reasonable percentages of units operating at a given time. The “*Percentage of time burner fires each hour*” column shows the time each burner is actually firing during the equipments operation.

The “*Weekly and seasonal use*” column shows the number of days per week the equipment is used. These values, like the “*Average use per day (hours per day)*” column were obtained from each piece of equipments application. Note that the diesel fueled boilers and the portable diesel fueled heaters are only operated 6 months per year. Staff allowed 6 months of downtime for the colder periods of the year in southern California which accounts for up to 6 months of the year.

TABLE 3 – SUGGESTED USAGE ADJUSTMENTS

SUGGESTED USAGE ADJUSTMENTS FOR DAILY AND ANNUAL BEST ESTIMATE OF EMISSION REDUCTIONS FORGONE					
Equipment Type	Ave use per day (hours/day)	Ave Firing Rate (% max rating)	Percentage of time burner fires each hour	Ave % of units operate each day	Weekly and seasonal use
Asphalt Day Tankers	6	90%	100%	75%	6 days/week
Diesel Fueled Boilers	12	50%	100%	100%	Only Operated 6 months/year
Diesel Fueled Heaters	12	100%	100%	75%	Only Operated 6 months/year
Food Ovens	16	50-60%	100%	90%	7 days/week
Fuel Cells	24	100%	100%	100%	3 – 5 Days ¹
Power Pressure Washers	5	75%	66%	75%	5 days/week
Tar Pots	7	90%	100%	75%	5.5 days/week

1: 3-5 days/startup 1 startup/year (avg. of 4 days/yr)

Sample Calculation, using the Power Pressure Washers and Hot Water Steamers and Cleaners as an example

The Best Estimate Daily NO_x Reductions Forgone for the power pressure washers was calculated using the following equations. The Best Estimate Daily NO_x Reductions Forgone calculations for the other equipment categories are based on the same logic.

Inventory = 261 units

Emission Factor (EF) for diesel fuel = 20.00 lb/10³ gal

Higher Heating Value (HHV) for diesel = 137,380 Btu/gal

Using a burner rating of 200,000 Btu/hour

To calculate the NO_x for the pressure washer category:

$$\text{Fuel Usage} = \text{Burner Rating} / \text{HHV} = 200,000 \text{ Btu/hr} / 137,380 \text{ Btu/gal} = 1.46 \text{ gal/hr}$$

To calculate the NO_x:

$$\text{NO}_x * \text{Fuel Usage} = (20.00 \text{ lb}/10^3 \text{ gal} \times 1.46 \text{ gal/hr}) / 1000 = 0.0291 \text{ lb/hr}$$

To determine the NO_x output per day, staff averaged the operation schedule based on every individual application for the pressure washers. Staff found that 5 hours was the average operating time per day.

$$\text{Lb/hr NO}_x * 5 \text{ hr} = 0.1456 \text{ lb/day of NO}_x$$

Staff then summed the NOx emissions for the Maximum Potential to Emit for each one of the pressure washers:

$$\sum_1^{261} NOx = 64.06 \text{ lb/day}$$

The current 80 ppm level for the pressure washer category was determined from the emissions output of the equipment based on data from manufactures of this equipment. The Rule 1147 NOx limit is given as 40 ppm. Therefore, the Maximum NOx Emissions Forgone can be calculated:

$$\text{Maximum NOx Reductions Forgone} = 64.06 \text{ lb/day} * (80 \text{ ppm} - 40 \text{ ppm} / 80 \text{ ppm}) = 32.03 \text{ lb/day}$$

Finally, the Best Estimate Daily NOx Reductions Forgone can be calculated. This is based on the Maximum NOx Reductions Forgone times the percentages that are shown in Table 3.

$$\text{Best Estimate Daily NOx Reductions Forgone} = 32.03 \text{ lb/day} * 0.75 * 0.66 * 0.75 = 11.89 \text{ lb/day of NOx}$$

Therefore, the daily NOx reductions forgone from the pressure washer category is 11.89 pounds per day.

The remainder of the equipment categories for the combustion processing equipment was calculated using the same logic and TABLE 4 – SUGGESTED USAGE ADJUSTMENTS below shows the results.

TABLE 4 – EMISSION IMPACT ASSESSMENT

PAR 222 Equipment Categories & PAR 219 Exemptions	PAR 222 Criteria	Existing Units	Current NOx Emissions	Rule 1147 Limit	Best Estimate - Daily NOx Reductions Forgone
		Count	(ppm)	(ppm)	(lbs/day)
Power Pressure Washers	< 50 gal fuel/day, ≤ 150,000 btu/hr	261	80	40	11.89
Asphalt Day Tankers	159 – 5,000 gal, LPG fired	58	110	60	9.82
Tar Pots	159 – 1,000 gal, LPG fired	148	110	60	34.40
Micro-Turbines	No Rule 1147 implications	16	N/A	N/A	N/A
Food Ovens	≤ 2,000,000 btu/hr Natural gas fired	55	102	30	22.46
Fuel Cells	< 90,000 Therms/yr	2	60	60	0.00
Portable Diesel Fueled Heaters	≤ 250,000 btu/hr	9	80	40	1.08
Diesel Fueled Boilers	< 2,000,000 btu/hr > 4,000 ft elev > 15 mi offshore	5	80	40	0.30 0.74
ICEs -	2-way radio tower	16	594	33	56.04

Remote Tower	No utility, electricity or natural gas within ½ mi radius				
Total Daily and Annual NOx Emission Reductions Forgone				254.15	136.44

The number of permitted units (and open applications for units) in these categories are nearly identical to 5 years earlier and the number can increase or decrease monthly. The average number of units in the permit system is not expected to change.

COST ANALYSIS

The proposed amendments to Rules 219 and 222 will provide a net cost savings benefit to industry, since they will be able to continue business as usual, operate their equipment subject to Proposed Amended Rule 219 and Proposed Amended Rule 222 in a similar manner to their current written permit, while paying less money in associated fees. Staff also recognizes a cost impact to the District which is due to a minimal loss in revenue by converting emission sources that were initially subject to a written District permit to the proposed Rule 222 filing program.

TABLE 5 – COMPARISON OF PERMITTING FEES AND PROPOSED REGISTRATION FEES - below shows the categories of emission sources that are being proposed to be converted from written permit to the Rule 222 filing program and the costs associated with the proposed amendments.

TABLE 5 – COMPARISON OF PERMITTING FEES AND PROPOSED REGISTRATION FEES

Category	Schedule	PERMITTING			REGISTRATION		CURRENT APPLICANTS		
		A	B	C	D	E	G	H	G x H
		Permit Processing Fee	Annual Operating Fee	Annual Operating Emiss Fee	Initial Filing Fee	Annual Renew Fee	Δ\$ for 1 unit Only	On Ave units/yr	Δ\$ unit/yr
Aerosol Can Recycling	A	\$1,364.63	\$310.85	\$115.56	\$0.00	\$0.00	\$426.41	5	\$2,132.05
Asphalt Day Tanker	A	\$1,364.63	\$310.85	\$115.56	\$173.56	\$173.56	\$252.85	3	\$758.55
Asphalt Pvmnt Heaters	B	\$2,174.89	\$310.85	\$115.56	\$173.56	\$173.56	\$252.85	1	\$252.85
Diesel Fueled Boilers	B	\$2,174.89	\$310.85	\$115.56	\$173.56	\$173.56	\$252.85	1	\$252.85
Portable Diesel Fueled Heaters	A	\$1,364.63	\$310.85	\$115.56	\$173.56	\$173.56	\$252.85	1	\$252.85
Food Ovens	C	\$3,440.06	\$1,113.34	\$115.56	\$173.56	\$173.56	\$1,055.34	4	\$4,221.36
Fuel Cells	A	\$1,364.63	\$310.85	\$115.56	\$173.56	\$173.56	\$252.85	1	\$252.85
Laser Cutters	C	\$3,440.06	\$1,113.34	\$115.56	\$0.00	\$0.00	\$1,228.90	3	\$3,686.70
Laser Etching & Engraving	B	\$2,174.89	\$310.85	\$115.56	\$0.00	\$0.00	\$426.91	5	\$2,132.05
Micro-Turbines	A	\$1,364.63	\$310.85	\$115.56	\$173.56	\$173.56	\$252.85	1	\$252.85
Power Pressure Washers	A	\$1,364.63	\$310.85	\$115.56	\$173.56	\$173.56	\$252.85	18	\$4,551.30
Tar Pots	A	\$1,364.63	\$310.85	\$115.56	\$173.56	\$173.56	\$252.85	6	\$1,517.10
ICEs - Remote Tower	C	\$3,440.06	\$1,113.34	\$115.56	\$173.56	\$173.56	\$1,055.34	16	\$16,885.44
Column H, Units/Year, on average, represents data that is subject to revision							Revenue Loss To District		\$37,148.80

Staff anticipates additional potential impacts for the District from the annual operating fees of equipment sources currently under the permitting program that are being proposed to transition to the filing program.

INCREMENTAL COST-EFFECTIVENESS

Under Health and Safety Code § 40920.6, the AQMD is required to perform an incremental cost analysis when adopting a Best Available Retrofit Control Technology (BARCT) rule or feasible measure required by the California Clean Air Act. To perform this analysis, the AQMD must (1) identify one or more control options achieving the emission reduction objectives for the proposed rule, (2) determine the cost effectiveness for each option, and (3) calculate the incremental cost effectiveness for each option. To determine incremental costs, the AQMD must “calculate the difference in the dollar costs divided by the difference in the emission reduction potentials between each progressively more stringent potential control option as compared to the next less expensive control option.” The proposed amendments to Rules 219 and 222 do not implement a more restrictive BARCT or feasible control measure, and therefore § 40920.6 is inapplicable.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

In accordance with the California Environmental Quality Act (CEQA), and the South Coast Air Quality Management District (SCAQMD) Rule 110, SCAQMD, as the Lead Agency, has prepared a Notice of Preparation of a Draft Environmental Assessment (NOP) for PARs 219 and 222 and an Initial Study (IS). The NOP and IS serve two purposes: 1) to solicit information on the scope of the environmental analysis for the proposed project, and 2) to notify the public that the SCAQMD will prepare a Draft Environmental Assessment (EA) to further assess potential adverse environmental impacts that may result from implementing the proposed project. The NOP/IS has been circulated for a 30-day public review and comment period from October 18, 2012, to November 16, 2012. A CEQA scoping meeting will be held on November 8, 2012. Responses to any comments on the CEQA document received during the CEQA scoping meeting and 30-day public review and comment period will be prepared and will be incorporated into the Draft EA. Copies of the NOP/IS can be obtained by calling the SCAQMD’s Public Information Center at (909) 396-2039 or by accessing the SCAQMD’s website at <http://www.aqmd.gov/ceqa/aqmd.html>.

SOCIOECONOMIC ANALYSIS

The proposed amendments to Rule 219 expand the list of equipment exempt from a written permit and clarify existing rule language. The proposed amendments to Rule 222 would transition some of the exempt equipment to the more streamlined Rule 222 filing program. Some equipment proposed to be exempted by Rule 219, such as aerosol can recycling systems, laser cutting and laser etching/engraving equipment, carpet shearing machines and associated controls, cosmetic filling stations and associated controls, and charbroilers used at non-commercial multi-family residences, would not be subject to the Rule 222 filing program.

Impacts of Proposed Amendments

The proposed amendments to Rule 219 would affect a variety of equipment including asphalt day tankers; asphalt pavement heaters; diesel fueled boilers; portable diesel fueled heaters; food ovens; fuel cells; laser cutters; laser etchers and engravers; micro-turbines; natural gas, propane, and oil odorant storage; power pressure washers; tar pots; piston-type ICEs used at remote two-way transmission towers; aerosol can recycling systems; and others. Under existing rule language, any affected equipment requiring a written permit is subject to a one-time permit processing fee when applying for a permit, and annual operating and flat emissions fees thereafter. The proposed amendments would replace both the one-time and annual fees for permitted equipment with a reduced Rule 222 initial filing fee and annual renewal fee. There are approximately 241 facilities in a wide variety of industries affected by the proposed amendments.

The purpose of the proposed amendments is to simplify the administration and implementation of the permit system. An ancillary effect is to eliminate or reduce permitting costs for affected facilities. Table 1 shows the distribution of annual cost reductions by major industry as affected equipment switches from permits to registration. Of the total \$144,462 annual reduction in costs, the largest would occur in the nondurable manufacturing (35%), construction (19%), information (13%), and services (11%) sectors. Table 1 also shows the impact of the proposed amendments on one-time permit fees. The reduction in one-time application costs provides an estimate of future avoided permitting costs assuming new permit applications stay at the existing level. The savings may be underestimated. First, total projected fee reductions do not include the reduced permitting costs associated with the proposed exemption for aerosol can recycling systems. There are no such systems currently permitted by the SCAQMD. Staff lacks sufficient data to accurately identify a count for aerosol can recycling equipment. Based on staff's interviews with industry representatives the number of such systems is estimated to be very small (<5). Second, affected facilities that have no other equipment permits would also be exempt from flat emission fees. Finally, exempt equipment would no longer need to comply with the respective BACT or other rule stipulations, which may not be feasible because of the size or configuration of equipment.

TABLE 6: FEE IMPACT BY INDUSTRY

Industry	One-Time	Annual
Oil & Gas Extraction	-\$8,337	-\$961
Mining	-\$3,573	-\$412
Utilities	-\$26,204	-\$3,020
Construction	-\$233,450	-\$26,909
Durable Manufacturing	-\$54,442	-\$4,784
Nondurable Manufacturing	-\$196,133	-\$50,400
Wholesale	-\$20,248	-\$2,334
Retail	-\$31,707	-\$8,067
Transportation &	-\$15,484	-\$1,785
Information	-\$79,659	-\$18,194
Real Estate & Rental Leasing	-\$19,057	-\$2,197
Services	-\$145,311	-\$16,749
Governments	-\$77,468	-\$8,649
Total	-\$911,073	-\$144,462

Table 2 shows the distribution of savings among the affected equipment categories. Of the approximately 608 pieces of equipment affected by the proposed amendments, power pressure washers (261 units) and tar pots (148 units) are the largest categories. On a per equipment basis, the largest cost reductions would occur in food ovens, laser cutters, and the piston-type internal combustion engines (ICEs) used at certain two-way remote transmission towers. Under existing rules, units in these categories would be subject to an annual operating fee of \$1,113. All other affected equipment categories are currently subject to an annual operating fee of \$311 under existing rules. Under the proposed amendments all affected equipment would pay an annual registration fee of \$174. The proposed amendments would result in the largest reductions in annual renewal costs for food ovens (\$52,000), power pressure washers (\$36,000), and tar pots (\$20,000).

TABLE 7: FEE IMPACT BY EQUIPMENT CATEGORY

Equipment	Count	One-Time	Annual
Asphalt Day Tankers	58	-\$69,082	-\$7,963
Asphalt Pavement Heaters	2	-\$2,382	-\$275
Diesel Fuel Boilers	5	-\$10,007	-\$686
Food Ovens	55	-\$179,658	-\$51,688
Fuel Cells	2	-\$2,382	-\$275
Laser Cutters	5	-\$16,333	-\$4,699
Laser Etchers	31	-\$62,041	-\$4,256
Micro-Turbines	16	-\$19,057	-\$2,197
Piston-type ICEs	16	-\$52,264	-\$15,036
Portable Diesel Fueled	9	-\$10,720	-\$1,236
Power Pressure Washers	261	-\$310,869	-\$35,833
Tar Pots	148	-\$176,278	-\$20,319
Total	608	-\$911,073	-

CEQA Alternatives

Three alternatives to the proposed amendments were specified in the California Environmental Quality Act (CEQA) analysis. Alternative A—No Project—maintains existing permitting requirements for affected equipment and maintains all other aspects of existing rule language. Alternative B—Reduction in Rating—reduces the maximum capacity of asphalt day tankers subject to the proposed amendments from 5,000 gallons to less than 4,000 gallons. Alternative C—Excluded Equipment—would exclude affected power pressure washers and food ovens from the proposed amendments.

Table 3 compares the annual and one-time fee reductions associated with the proposed amendments and CEQA alternatives. Alternative A would have no impact relative to the proposed amendments. Alternative B would remove the proposed permit exemption for eight affected large capacity (less than 4,000 gallons) asphalt day tankers. The forgone annual fee reduction from Alternative B relative to the proposed amendments would be approximately \$1,100. Alternative C would result in forgone revenue reductions of approximately \$88,000 relative to the proposed amendments. The proposed amendments would result in the greatest savings among all the CEQA alternatives.

**TABLE 8:FEE IMPACT OF PROPOSED AMENDMENTS
AND CEQA ALTERNATIVES**

CEQA Alternatives	One-time	Annual
Proposed Amendments	-\$911,073	-\$144,462
Alternative A	0	0
Alternative B	-\$901,544	-\$143,363
Alternative C	-\$420,546	-\$56,941

Rule Adoption Relative to the Cost-effectiveness Schedule

On October 14, 1994, the Governing Board adopted a resolution that requires staff to address whether the proposed amendments being considered for adoption are in rank order of cost-effectiveness in the Air Quality Management Plan (AQMP). The proposed amendments to Rules 219 and 222 are not part of the AQMP; therefore, the ranking order of cost-effectiveness is not applicable here.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE 40727

The draft findings include necessity, authority, clarity, consistency, non-duplication and reference, as defined in Health and Safety Code Section §40727. The draft findings are as follows:

Necessity - The AQMD Governing Board finds and determines that Proposed Amended Rules 219 and 222; Equipment and Not Requiring A Written Permit Pursuant To Regulation II and Filing Requirements for Specific Emission Sources Not Requiring A Written Permit Pursuant To Regulation II, is necessary to enhance recordkeeping and reporting, and provide a simpler, more expeditious and cost-effective option to local facilities and the District.

Authority - The AQMD Governing Board obtains its authority to adopt, amend or repeal rules and regulations from Health and Safety Code §§ 40000, 40001, 40440, and 42300 et seq.

Clarity - The AQMD Governing Board finds and determines that Proposed Amended Rules 219 and 222 are written and displayed so that the meaning can be easily understood by persons directly affected by it.

Consistency – The AQMD Governing Board finds and determines that Proposed Amended Rules 219 and 222 are in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or federal or state regulations.

Non-Duplication – The AQMD Governing Board has determined that Proposed Amended Rules 219 and 222 do not impose the same requirement as any existing state or federal regulation, and the proposed amendment is necessary and proper to execute the powers and duties granted to, and imposed upon, the AQMD.

Reference - In adopting this proposed amendment, the AQMD Governing Board references the following statutes which AQMD hereby implements, interprets or makes specific: Health and Safety Code §§40000, 40001, 40440, and 42300 et seq.

COMPARATIVE ANALYSIS

California Health and Safety Code Section 40727.2 requires the comparative analysis with any federal or other AQMD rules that apply to the same equipment or source type as the proposed amendments. There are no federal requirements for these small emitting types of equipment.

DRAFT CONCLUSIONS AND RECOMMENDATIONS

Staff recommends that PAR219 and PAR222 be adopted in efforts to streamline the current permitting system.

PUBLIC COMMENTS AND RESPONSES

Prior to the initiation of amendments to Rules 219 and 222, two requests were received by staff to exempt certain equipment from a written permit.

The first request was to exempt automated Materials Recycling Facilities (MRFs) including those using density and pneumatic processes from written permit requirements. Based on field visits to two MRFs, and comparing the potential PM10 emissions with currently exempted paper shredding facilities, staff concluded that automated MRFs, based on the PM10 emissions observed, will continue to require a written permit, whereas manually-sorted MRFs are already exempt from a written permit, based on current Rule 219.

The second request was to exempt carpet shearing operations from written permit requirements. Based on staff evaluation, staff has included such an amendment into Rule 219(p)(10).

Staff held the public workshop and CEQA scoping meeting on July 19, 2012. The public commenting period followed beginning on July 19, 2012 and continued until August 3, 2012. During this commenting period, staff received 12 comment letters and these are shown in Appendix A. In addition, staff received 5 comment letters after the closing of the comment period and these letters are shown in Appendix B.

Staff also held a public consultation meeting as well as a second CEQA scoping meeting on November 8, 2012. The public commenting period followed beginning on November 8, 2012 and continued until November 16, 2012. Staff received 10 comments during the open forum of the public consultation meeting and these comments are shown in Appendix C along with staff's responses to the comments. In addition, staff received 9 comments letters during the commenting period, November 8, 2012 and continuing up to November 16, 2012, and these comment letters, as well as staff's responses, are shown in Appendix D.

REFERENCES

SCAQMD Staff Report, Proposed Rule 1147 – NO_x Reductions From Miscellaneous Sources, September 2011, Wayne Barcikowski, Air Quality Specialist

SCAQMD Staff Report, Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II, May 2006, Moustafa Elsherif, M.S., Program Supervisor

Capstone Turbine Corporation, 21211 Nordhoff Street, Chatsworth, CA 91311

Hydro Tek.US, Cleaning and Equipment Manufacturing, 2353 Almond Avenue, Redlands, CA 92374

INTERNET MATERIAL:

Aerosolv Systems, Katec Incorporated, 1728 Virginia Beach Blvd., Suite 105, Virginia Beach, Virginia, 23454, (800) 843-6808

<http://www.aerosolv.com/aerosolv-systems/>

APPENDIX A: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD JULY 19 TO AUGUST 3, 2012

The following comments are from Alta Environmental – Comment Letter #1

From: Paul Engel [Paul.Engel@AltaEnviron.com]
Sent: Tuesday, July 24, 2012 2:02 PM
To: Don B Hopps
Subject: Comments on Rule 219 / Rule 222 Amendments

Don

Per our telephone conversation, earlier today, please see my suggested language clarifications below;

Current Draft Rule 219 Language	Suggested Language	
<p>Rule 219(b)(1) Piston type internal combustion engines with a manufacturer's rating of 50 brake horsepower or less; or gas turbine engines, or microturbines or other distributed energy generation systems, individual or combined, with a maximum heat input rate of 3,500,000 British Thermal Units (BTU) per hour or less that are state-certified</p>	<p>i) Piston type internal combustion engines with a manufacturer's rating of 50 brake horsepower or less; or ii) Gas turbine engines, or microturbines or other distributed energy generation systems; individual or combined, with a maximum heat input rate of 3,500,000 British Thermal Units (BTU) per hour or less that are state-certified</p>	1-1
<p>Rule 219(p)(22) Equipment used to recycle aerosol paint cans by puncturing in an enclosed system which is vented through a carbon filter. This exemption shall only apply to aerosol paint recycling systems that process aerosol paint cans that are used on-site at that same facility.</p>	<p>Equipment used to recycle aerosol paint cans <u>which contain VOC product and/or VOC propellant</u> by puncturing in an enclosed system which is vented through <u>an activated carbon filter canister</u>. This exemption shall only apply to aerosol paint-can recycling systems that process aerosol paint cans that are used <u>or produced</u> on-site at that same facility.</p>	1-2
Current Draft Rule 222 Language	Suggested Language	
<p>DEFINITIONS and Table I Microturbines or other distributed energy generation systems, individual or combined, with a maximum heat input rate of 3,500,000 British Thermal Units (BTU) per hour or less that are state-certified</p>	<p>Microturbines or other distributed energy generation systems; individual or combined, with a maximum heat input rate of 3,500,000 British Thermal Units (BTU) per hour or less that are state-certified</p>	1-3
<p>DEFINITIONS and Table I FOOD CONVECTION OVEN is any equipment used exclusively for food preparation has a maximum heat input rate of 2,000,000 British Thermal Units (BTU) per hour and is fired exclusively on natural gas .</p>	<p>FOOD CONVECTION OVEN is any equipment used exclusively for food preparation has <u>a heat input not less than 2,000,000 British Thermal Units (BTU) per hour or greater than</u> a maximum heat input rate of 2,000,000 British Thermal Units (BTU) per hour and is fired exclusively on natural gas .</p>	1-4
<p>"Individual or combined" terminology sets a precedent which is slippery slope and can lead to confusion to enforcement/compliance. In all other Rules, the heat rating is per the particular piece of equipment to determine applicability. I cannot find another Rule where the BTU ratings are aggregated to qualify for an exemption or to require a Rule applicability.</p>		1-5

If you have any questions, please call or e-mail me.

PAUL ENGEL, CPP, REA
SENIOR ENGINEER III



19700 Fairchild, Suite 170, Irvine, CA 92612
o. 714.532.5777 c. 714.473.8036 f 949-724-9109
paul.engel@altaenviron.com | www.altaenviron.com

Welcome to Alta Environmental! Effective July 2011, Alta Environmental represents the combined teams of Winefield & Associates and our recent acquisitions, Coffey Environmental/CTL Environmental Services and Justice & Associates. Alta Environmental is a premiere environmental consultancy for industrial and construction interests throughout California. For more information about our subsurface remediation, environmental compliance, and occupational safety capabilities, please [click here](#) for our website.

Response to Comment #1-1

Staff appreciates the feedback regarding the proposed rule language in both proposed amended rules; 219 and 222. Based on the comment, staff has revised the proposed rule language by removing “individual and combined” along with the changes as follows: “. . . or gas turbine engines including micro-turbines, with a maximum heat input capacity of 3,500,000 British thermal units (Btu) per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation with the state of California or were in operation prior to May 3, 2013.”

Response to Comment #1-2

Staff agrees with the comment and has revised the proposed language as follows: “*Equipment used to recycle aerosol cans by puncturing the can in an enclosed system which is vented through an activated carbon filter. This exemption shall only apply to aerosol recycling systems where the aerosol can to be recycled was used as part of their operation at the facility or from facilities under common ownership.*”

Response to Comment #1-3

Staff agrees and has revised the proposed rule language consistent with the revised language in Rule 219, as detailed in Response to Comment #1-1.

Response to Comment #1-4

Staff agrees and has revised the proposed language for food convection ovens in Table I of Proposed Amended Rule 222 as follows: “*Food Convection Ovens that are exclusively fired on natural gas and have a rated maximum heat input capacity of no more than 2,000,000 Btu/hour and where the VOC emissions from yeast fermentation are less than one pound per day.*”

Response to Comment #1-5

Please see Response to Comment 1-1.

The following comments are from CPP Corporation – Comment Letter #2

From: Al Bannister [Al.Bannister@cppcorp.com]
Sent: Thursday, July 26, 2012 10:35 AM
To: Don B Hopps
Cc: pmoore@yorkeengr.com
Subject: Rule 219 exemptions

Don:

We were unable to attend the Public Workshop for Proposed Amended Rules 219 and 222 at the SCAQMD yesterday. However, we want to submit comments and a request for suggested changes for Rule 219. Specifically, we believe that Rule 219 should include a permit exemption for aluminum melting pots which process alloys that contain traces of toxic air contaminants such as beryllium and nickel as long as the health risk assessment does not exceed Rule 1401 standards. This change would allow us to operate very small aluminum crucible furnaces and continue to be compliant with Rule 1147. These small furnaces cannot be economically upgraded. The cost to upgrade greatly exceeds the value of the equipment.

2-1

The permit exemption in 219(e)(2) is for melting pots with a capacity of less than 992 lbs in which aluminum alloys are melted that contain over 50% aluminum provided the alloy does "not contain alloying elements of arsenic, beryllium, cadmium, chromium and/or lead and such furnaces are exempt pursuant to paragraph (b)(2)" (i.e. heat input rating is <2,000,000 Btu/hour). If the alloys used in these melting pots contain trace amounts of beryllium, for example, it would appear that this exemption is unavailable. However, we are aware of a case in which the SCAQMD allowed a permit exemption for melting pots which process alloys that do not contain significant amounts of beryllium based on the results of a Rule 1401 health risk assessment. Therefore, we would like to propose modification to the language in paragraph 219(e)(2) to state:

2-2

(2) Crucible furnaces, pot furnaces or induction furnaces with a capacity of 450 kilograms (992 pounds) or less each, where no sweating or distilling is conducted and where only the following materials are poured or held in a molten state and control equipment exclusively venting the equipment:

- (A) Aluminum or any alloy containing over 50 percent aluminum,
- (B) Magnesium or any alloy containing over 50 percent magnesium,
- (C) Tin or any alloy containing over 50 percent tin,
- (D) Zinc or any alloy containing over 50 percent zinc,
- (E) Copper or any alloy containing over 50 percent copper,
- (F) Precious metals, and
- (G) Glass.

2-3

Provided these materials do not contain alloying elements of arsenic, beryllium, cadmium, chromium and/or lead, and such furnaces are exempt pursuant to paragraph (b)(2). **However, if a health risk assessment, that is approved by the Executive Officer, demonstrates that trace amounts of beryllium in these alloys will not result in health risk greater than that identified in subparagraph (d)(1)(A), or paragraphs (d)(2) or (d)(3) in Rule 1401 – New Source Review of Toxic Air Contaminants, then this exemption is applicable.**

Is the SCAQMD open to consider such a change to Rule 219? By adding this proposed language to Rule 219 our aluminum melting pots would qualify for a permit exemption and would be removed from Rule 1147 applicability. We have done a more detailed analysis of our equipment and processes and would be willing to share this with you if you are interested. Please let me know if this is the correct avenue for submitting this request. Thank you for your consideration.

2-4

Sincerely,

Al Bannister
Director of Facilities
CPP Corp.
951-545-8638

Response to Comment #2-1

The current rule language for Rule 219 paragraph (e)(2) does not include any toxics such as arsenic, beryllium, cadmium, chromium and lead. Therefore, no trace of any of these toxics is acceptable to meet this exemption. Staff has concerns with “traces” of these toxic materials based on how much would be an acceptable risk for human health. An environmental analysis would have to be conducted prior to determination if a permit is necessary which is beyond the scope of Rule 219. The limited purpose of Rule 219 is to exempt certain small emissions sources that could then transition from their current written permit into a more streamlined Rule 222 filing program.

Response to Comment #2-2

The commenter is correct, if a melting pot, with a holding capacity of 450 kilograms (992 pounds) contains any metal(s) as specified in paragraph (e)(2) with trace amounts of toxic materials, the exemption would not apply. A permit exemption for trace amounts of toxic materials would have to be addressed in writing and approved by the Executive Officer on a case by case basis.

Response to Comment #2-3

Staff appreciates the suggested additional rule language added to the last paragraph of Rule 219 section (e)(2) but believes the current rule language is sufficient. If a facility is required to use trace amounts of toxic materials they will have to submit their request in writing and upon approval by the Executive Officer it may be granted an exemption pursuant to paragraph (e)(2). The alternative would be a written permit.

Response to Comment #2-4

Staff appreciates the comments in regard to trace amounts of toxics in alloys that are held in a molten state in melting pots. A permit exemption for trace amounts of toxic materials would have to be addressed in writing and approved by the Executive Officer on a case by case basis.

The following comments are from Disneyland Resort – Comment Letter #3

From: Jiang, Hao [Hao.Jiang@disney.com]
Sent: Friday, July 27, 2012 4:06 PM
To: Don B Hopps; Naveen Berry
Cc: Antonopolis, Bob; Dela Vara, Frank
Subject: Comments to proposed changes to R219
Attachments: Things Need AQMD Permit.doc

Hi Don and Naveen,

Thank you for providing us with the opportunity for commenting the proposed rule changes. Summarized below are the comments I had at your July 19 public workshop. I also attached a sheet we use for some equipments I mentioned below.

R219(b)(2): AQMD Annual Emission Report guideline provides a default external burner NOX emission rate at 20 lbs per 1000 gallons of diesel use; therefore one pounds of NOX emission equivalent to 50 gallons of diesel use. In order for the operator to easily understand and monitor the exemption condition, we suggest change this one to

"Boilers, process heaters, or any combustion equipment that ~~each~~ has a maximum heat input rate capacity of 2,000,000 Btu per hour (gross) or less and ~~is are~~ equipped to be heated exclusively with natural gas, methanol, liquefied petroleum gas, or any combination thereof; or diesel fueled boilers that are located above sea level of more than 4,000 feet or more than 15 miles offshore, and ~~the maximum NOx emission output of the equipment is less than one pound per day.~~ each uses less than 50 gallons of diesel fuel per day, or diesel or kerosene fueled portable space heaters that each has a maximum heat input rate capacity of 1,000,000 Btu per hour (gross) or less and uses less than 50 gallons of fuel per day."

3-1

R219(b)(3): While a diesel burner is used to heat water, pressure washers always come with a small gasoline engine to provide pressure. We understand that the District's intention is to exempt pressure washer based on the burner size and daily fuel use. To avoid confusing, we suggest change this one to

"Power pressure washers, portable hot water or steam washers and cleaners, ~~equipped with a heating device that has~~ a maximum heat input capacity of 2,000,000 Btu per hour (gross) or less and is equipped to be heated exclusively with natural gas, methanol, liquefied petroleum gas, or any combination thereof or diesel fuel, and ~~the maximum NOx emission output of the equipment is less than one pound per day and the heating device uses less than 50 gallons (or GGE) of fuel per day.~~ This exemption does not apply to piston type internal combustion engines or turbines."

3-2

R219(f)(5): Suggest change to include dry ice blasting cleaner in this clause, because this type of equipment generate very little emissions.

"Portable sand/water blaster equipment and associated piston type internal combustion engine provided the water in the mixture is 66 percent or more by volume is maintained during operation of such equipment, ~~or portable dry ice (CO2) blasting cleaning equipment provided maximum daily dry ice use is 100 lbs or less~~ . Piston type internal combustion engines must be exempt pursuant to paragraph (b)(1)."

3-3

R219(h)(1): Suggest change to

"Printing and related coating and/or laminating equipment and associated dryers and curing equipment, as well as associated air pollution control equipment, provided that such dryers and curing equipment are exempt pursuant to paragraph (b)(2) and that air pollution control equipment is not required for source specific rule compliance, ~~are exempt pursuant to paragraph (b)(2), and provided that:~~"

3-4

R219(i)(5): Suggest change to

"Equipment ~~including dry material storing equipment~~ used in eating establishments for the purpose of preparing food for human consumption."

3-5

R219(p)(22): Suggest change to

"Equipment used to recycle aerosol ~~paint~~ cans by puncturing the can in an enclosed system which is vented through a carbon filter. This exemption shall only apply to aerosol ~~paint cans~~ recycling systems that process aerosol ~~paint~~ cans that were used on-site at that same facility."

3-6

Questions:

R219(c)(3): Can identical placement be used for an equipment, which AQMD lists the equipment serial number in the permit?

3-7

R219(s)(3): If a facility does hold an AQMD permit, will a R222 registration is required for 3 types of operations as described in R219(s)(3)?

3-8

Thank you
Hao Jiang, P.E.
Disneyland Resort Environmental Affairs
TDA 206E
P.O.Box 3232
Anaheim, Ca 92803
Phone: (714) 781-4504
Fax: (818) 238-4101
E-mail: hao.jiang@disney.com

Response to Comment #3-1

Staff agrees with the commenter's suggestion to add additional rule language consisting of "and uses less than 50 gallons of fuel per day," and this change was made to the rule language. Staff included portable diesel fueled heaters but under a separate category included in paragraph (b)(4) and limited a maximum heat input capacity of 250,000 Btu per hour and not the requested 1,000,000 Btu per hour.

Response to Comment #3-2

Staff revised the proposed rule language in paragraph (b)(4) that pertains to portable power washers. However, staff does not believe that keeping the current rule language will be confusing. The revised rule language for paragraph (b)(4) is as follows: "Portable power pressure washers and hot water or steam washers and cleaners, with a maximum rated heat input capacity of 550,000 Btu per hour (gross) or less and is equipped to be heated exclusively with natural gas, methanol, liquefied petroleum gas, or any combination thereof or diesel fuel, and the maximum NOx emission output of the equipment is less than one pound per day and uses less than 50 gallons of fuel per day. This exemption does not apply to piston type internal combustion engines or turbines."

Response to Comment #3-3

Compliance and permitting staff both have strong concerns with regard to an exemption for dry ice (CO₂) blasting. The concerns are not the dry ice projectiles, but the coating on the substrate that will be blasted with the dry ice projectiles. This process can generate dust from substrates and from any toxics that may be in a coating that was previously applied to the substrate. AQMD staff maintains that dry ice blasting will continue to be a material removing process and require a permit to operate.

Response to Comment #3-4

Staff concurs and has revised the proposed rule language as follows: *“Printing and related coating and/or laminating equipment and associated dryers and curing equipment, as well as associated air pollution control equipment, provided such dryers and curing equipment are exempt pursuant to paragraph (b)(2), and air pollution control equipment is not required for source specific rule compliance, and provided that:”*

Response to Comment #3-5

Staff does not believe that the rule language in Rule 219 subparagraph (i)(5) needs to be changed with the commenter’s suggestion. The current rule language *“Equipment used in eating establishments for the purpose of preparing food for human consumption”* provides an exemption to equipment that is used in eating establishments for the purpose of preparing food.

Response to Comment #3-6

See Response to Comment #1-2.

Response to Comment #3-7

If a facility operates a permitted piece of equipment that is damaged, wears out or becomes inoperable and is replaced with an identical piece of equipment that has a different model number or serial number the permit holder should contact the AQMD permitting staff to update the permit to operate. The commenter should note that it is important to have the correct equipment described on the permit to operate because it is one of the first steps to a compliance inspection for AQMD inspectors. If the equipment does not match the permit to operate, subsequent compliance action may be implemented to require the permit holder to update the permit or replace the permit to operate with a new permit to operate, depending on the situation.

Response to Comment #3-8

The rule language provided in Rule 219 paragraph (s)(3) requires a single filing for all the categories of equipment, processes or operations as shown in subparagraphs (s)(3)(A), (s)(3)(B) and (s)(3)(C), but only if a facility does not have a written permit for any equipment and emits 4.0 tons or more of VOCs in any fiscal year. The scope of the proposed amendments to Rule 222 is to include small emitting sources such as portable power pressure washers that use a heater or burner that has a rated maximum heat input capacity of 500,000 Btu/hour or less, diesel fuel boilers that have a rated maximum Btu/hour of 2,000,000 Btu/hour or less, micro-turbines and several other categories of equipment that produce up to one pound of NO_x emissions or less per day. The proposed amendments to Rule 222 does not include printing operations, coating or adhesive application or laminating equipment or hand application of VOC containing materials for inclusion to the Rule 222 filing program.

The following comments are from Metropolitan Water District – Comment Letter #4

From: Kaufman,Carol Y [cykaufman@mwdh2o.com]
Sent: Saturday, July 28, 2012 5:45 PM
To: Don B Hopps
Cc: Naveen Berry; Koch,Bart; jbell mwdh2o.com; Guillory,Dan
Subject: MWD Comments re:: Proposed Amended Rules 219 and 222

Importance: High

Hi Mr. Hopps,

This is a follow-up to the July 19, 2012 Public Workshop for Proposed Amended Rules 219 and 222. Metropolitan Water District of Southern California (Metropolitan) appreciates the opportunity to participate in the rulemaking process and to provide comments on the proposed amendments. Metropolitan distributes wholesale water obtained from the Colorado River and Northern California through 26 member agencies in a 5,200 square mile service area covering six counties and approximately 19 million people. In support of the maintenance of Metropolitan's extensive system of water conveyances, reservoirs and water treatment plants, we operate equipment possessing diesel burners (i.e., power pressure washers/steam cleaners; asphalt distributor tanker truck) that should be captured by the proposed changes to Rule 222.

Specifically, we would like clarification to the proposed rule wording to confirm that the following equipment is included in the Rule 222 registration option as an alternative to the written permits:

1. Asphalt Day Tanker – as proposed, this equipment is defined as a storage tank with maximum capacity between 159 through 5,000 gallons, that is mounted on a motor vehicle that is used to transport heated or unheated asphalt or coal tar, and is equipped with Liquefied Petroleum Gas fired burners. Metropolitan has an existing 2,000 gallon asphalt distributor tanker truck that possesses a diesel fired burner, 770,000 Btu/hr input capacity. The operating temperature is between 140 to 180 degrees F. We ask that this similar asphalt tanker unit with a diesel burner be included in the Rule 222 registration program.

4-1

2. Power Pressure Washers – as proposed, this equipment is defined a using a combustion process that has a maximum heat input capacity of no more than 2,000,000 Btu/hour to heat pressurized water for purposes of power

4-2

washing and uses no more than 50 gallons of fuel per day. Provisions for power pressure washers are also included in the partner Rule 219, however the proposed rule language further defines the units as "...portable hot water or steam washers and cleaners, with a maximum heat input capacity of 2,000,000 Btu per hour (gross) or less and is equipment to be heated exclusively with natural gas, methanol, liquefied petroleum gas, or any combination thereof or diesel fuel, and the maximum NOx emission output of the equipment is less than one pound per day and uses less than 50 gallons (or GGE) of fuel per day." For consistency, the Rule 219 language should be incorporated into the Rule 222 wording for Power Pressure Washers.

Thank you for your consideration of our comments. We appreciate the SCAQMD staff's effort to reduce the Rule 1147 regulatory impact to industry by including this proposed equipment in Rules 219/222.

Please contact me if you have any questions.

Sincerely,

Carol Kaufman
Air Quality Program Manager
Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, CA 90012
213-217-6207
FAX 213-217-6700
Cell 310-850-6105

4-2
Cont'd

Response to Comment #4-1

The scope for the proposed amendment to Rule 222 is to include certain specified additional small emitting sources with no feasible potential for further reduction pursuant to Rule 1147 and transition them from a written permit to the Rule 222 filing program, but would still include the same operating conditions, in efforts to streamline the permitting of these small emitting sources into a simpler application type filing program. The proposed amendment for asphalt day tankers has two qualifications that must be met to be considered for inclusion into the Rule 222 filing program: (1) The maximum holding capacity of the coal tar or asphalt material must be at least 159 gallons but no more than 5,000 gallons (asphalt day tankers with less than 159 gallons are completely exempt), and (2) The fuel used to fire the burner(s) must be a liquefied petroleum gas. Diesel fuel heated asphalt day tankers are not included in the proposed language in Rule 219 or the Rule 222 filing program, as this type of equipment can be operated on LPG.

Response to Comment #4-2

Staff concurs and has revised the definition for power pressure washers accordingly. However, the rated maximum heat input capacity for the power pressure washers has been limited to 500,000 Btu per hour or less. The revised rule language is as follows: "*Power pressure washers, portable hot water or steam washers and cleaners, with a maximum rated heat input capacity of 500,000 Btu per hour (gross) or less and is equipped to be heated exclusively with natural gas, methanol, liquefied petroleum gas, or any combination thereof or diesel fuel, and the maximum NOx emission output of the equipment is less than one pound per day and uses less than 50 gallons of fuel per day. This exemption does not apply to piston type internal combustion engines or turbines.*"

Electrically heated burners shall be considered exempt from permit or the Rule 222 filing program requirements.”

The following comments are from Southern California Edison – Comment Letter #5



Zach Weepo
Sr. Environmental Specialist

Environmental Services
17E2
BOX 513249
Los Angeles, CA 90051

(213) 244-5822
Fax: (213) 244-2046
Mobile: (213) 272-8474
E-mail: zweepo@sempraenergy.com

July 31, 2012

Don Hopps
Air Quality Specialist Planning and Rules
SCAQMD 21865 Copley Drive
Diamond Bar, CA 91765

Subject: SCAQMD Rule 219 Proposed Rule Amendments

Mr. Hopps:

Southern California Gas Company (SCG) would like to respectfully submit these comments regarding the proposed amendments to Rule 219, Equipment Not Requiring a Written Permit Pursuant to Regulation II.

SCG would like SCAQMD to amend propose rule language that further clarifies that the exemption under SCAQMD Rule 219(m) (9) applies in all cases where a tank smaller than 2500 gallons and associated equipment is used for VOC containing liquid storage or transfer to and from such storage tanks. Specifically, the exemption does apply to odorant storage tanks, injection systems and carbon canisters in natural gas odorization operations. SCG would also like SCAQMD to amend proposed section p(22) to allow operators who consolidate their aerosol can waste to use aerosol can recycling systems and not require a permit.

Southern California Gas Company (SoCalGas) has been delivering clean, safe and reliable natural gas to its customers for more than 140 years. It is the nation's largest natural gas distribution utility, providing safe and reliable energy to 20.9 million consumers through 5.8 million meters in more than 500 communities. The company's service territory encompasses approximately 20,000 square miles in diverse terrain throughout Central and Southern California, from Visalia to the Mexican border.

As a California Public Utility Commission (CPUC) regulated natural gas transmission utility, SCG must accept CPUC quality commercial natural gas from local "producers" which is a CPUC mandate. Producers are small, medium, and large crude oil producing fields which produce CPUC quality commercial natural gas as a byproduct of their primary operations. This producer gas must be odorized to conform to CPUC safety standards and regulations. SCG has installed and operates several odorizing systems at 17 producer sites throughout the SCAQMD jurisdiction. Each one of the odorizing systems

5-1

5-2

has an odorant tank of less than 251 gallons. The actual range of the odorant tanks is as small as 6 gallons to as large as 120 gallons, which is more than 50% smaller than the current exemption size in Rule 219 m(9). To ensure that there is little ambiguity that these small systems are subject to permitting, SCG is recommending that the current language in 219 m(9) be modified to read as follows: *“Equipment used exclusively for VOC containing liquid storage and/or transfer to and from such storage, of less than 950 liters (251 gallons) capacity. This includes all **natural gas odorant storage and associated transfer equipment**. This exemption does not include asphalt.”* Language in red indicates amended language. Facts about the odorant storage systems:

- Odorant is stored as a liquid, not as a vapor
- Only one tank is larger than 60 gallons.
- Odorant systems do not vent during filling or normal operations
- The potential for VOC emissions from odorant tanks and transfer activities are negligible
- It is not cost effective for the SCAQMD to assign permit resources for equipment with negligible emissions.
- Carbon canisters are only used during periodic odorant transfer and are exempt per 219(m)(5)

5-2
Cont'd

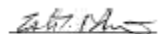
With respect to Rule 219 p(22), during the most recent public workshop, SCAQMD stated section p(22) was created to allow aerosol can recycling for operations as long as the recycler was not a large metals recycling operator. However the language inadvertently will restrict operators which have multiple locations and recycle aerosol cans in one location to conduct aerosol can recycling. SCG does not believe that this was the SCAQMD's intention while creating the language for this section. SCAQMD would like to encourage recycling as much as possible. In order to promote recycling while still requiring permitting for large metal recycling operations, SCAQMD should modify Rule 219 p(22) with the following (new language in red):

*“Equipment used to recycle aerosol paint cans by puncturing the can in an enclosed system which is vented through a carbon filter. This exemption shall only apply to aerosol paint recycling systems that process aerosol paint cans that were used on-site at that same facility or **facilities owned and operated by the same company.**”*

SGA appreciates your consideration of these comments and looks forward to working with the EPA on these amendments. If you need additional information, please free to contact me.

5-3

Thank you



Zach Muepo

Response to Comment #5-1

Staff appreciates receiving the comment letter from the Southern California Gas Company and will address their proposed language for Rule 219 subparagraphs (m)(9) and (p)(22) in the following comments and responses. See Response to Comment 5-2 and Response to Comment 4-2, respectively.

Response to Comment #5-2

AQMD permitting and compliance staff believes that a specific exemption for the storage of odorants for natural gas and associated transfer equipment is warranted. Staff will propose an exemption in Proposed Amended Rule 219 for the storage of odorant for natural gas, propane or oil of less than 950 liters (251 gallons) capacity and associated transfer and control equipment used exclusively for such equipment provided a filing pursuant to Rule 222 is submitted to the Executive Officer.

Response to Comment #5-3

Please see Response to Comment #1-2.

The following comments are from Eastern Municipal Water District – Comment Letter #6



Board of Directors

President and Treasurer
Joseph J. Kuebler, CPA

Vice President
Philip E. Paule

Ronald W. Sullivan
Randy A. Record
David J. Stawson

General Manager
Paul D. Jones II, P.E.

Director of The Metropolitan Water District of So. Calif.
Randy A. Record

Board Secretary and Assistant to the General Manager
Rosemarie V. Howard

Legal Counsel
Lemieux & O'Neill

August 3, 2012

Mr. Don Hopps
Planning, Rule Development and Area Sources
21865 Copley Drive
Diamond Bar, CA 91765
(dhopps@aqmd.gov)

Dear Mr. Hopps:

SUBJECT: Comment Letter – Proposed Amendments for Rule 219 and Rule 222

Eastern Municipal Water District (EMWD) appreciates the opportunity to provide comments on South Coast Air Quality Management (SCAQMD) Rule 219 and Rule 222 proposed amendments for Equipment Not Requiring a Written Permit and Filing Requirements for Specific Emission Sources Not Requiring a Written Permit, respectively. EMWD currently provides potable water and water reclamation services to 755,000 people in a service area of 542 square miles. Two (2) Water Filtration Plants and two (2) Desalinization Facility, in addition to MWD connections and local wells, provide potable water to the customers the District serves. EMWD has 1,732 miles of sewer collection system including lift stations and force-mains that convey sewage to the four (4) water reclamation facilities. These water reclamation facilities provide wastewater services to a portion of western Riverside County producing about 45 million gallons per day of tertiary treated recycled water that is distributed and utilized for agricultural, irrigation, landscape, industrial and environmental uses. As the provider of both water and wastewater reclamation services, EMWD is responsible for effectively managing its sources economically while being a good neighbor to the community. EMWD appreciates the intent of the proposed rule amendments to clarify exemptions as well as striving to meet goals set by the SCAQMD measurements for attainment within the basin. However, EMWD recommends changes in Rule 219 (b)(1) and Rule 222 Table 1, and Rule 219 (d) (10) as follows:

- Micro-turbines or other distributed energy generated system should be exempted individually as these units are required to meet state certification.

6-1

Mailing Address: Post Office Box 8300 Perris, CA 92572-8300 Telephone: (951) 928-3777 Fax: (951) 928-6177
Location: 2270 Trumble Road Perris, CA 92570 Internet: www.emwd.org

- Micro-turbines or other distributed energy generated systems purchased prior to October 5, 2012 be included in the permit exemption.
- Passive carbon odor scrubber volume restriction should be removed and the use within wastewater treatment facilities included in the permit exemption.

6-1
Cont'd

Additional, EMWD recommends the following changes:

Removal of Combination Requirement

Currently, the proposed amendment to the rule requires having the state certification for distributed generation to qualify for the permit exemption. There are only three state certified units for micro-turbines that operate on natural gas (see attachment). One of which will no longer be certified as of October 12, 2012, seven days after the effective date for Rule 222. Additionally, the two remaining certified units are over 200kW are under the 3.5 million BTU requirement but would not qualify for the permit exemption regulated as used multiple units. Therefore, there are no units used together that qualify under the proposed rule language. Additionally, micro-turbines or other distributed energy generated system are typically used for dual functions, energy and heat generation, and will use a combination of these units to meet the need of either function. Most companies justify the use of micro-turbines or other distributed energy generated system for operational savings provided by the dual functionality. EMWD, for example, utilizes a combination of these units to generate heat for heating and cooling a building and for heating a paint booth. Therefore, EMWD recommends the deletion of the wording "combined" in Rule 219 (b)(1) and Rule 222 Table 1 as this requirement creates additional permitting for units already certified by the state.

6-2

Purchased Micro-Turbines Exemption

EMWD recommends the inclusion of micro-turbines and other distributed energy generated system purchased prior to October 5, 2012 for the permit exemption in Rule 219 (b)(1) and Rule 222 Table 1. Therefore, purchased units after the October 5, 2012, both "used" units or "new" units not meeting state certification, will not be included in the permit exemption. EMWD operates nine (9) micro-turbine units that are currently not state certified and were initially funded from grants provided by SCAQMD and Southern California Edison. These units were installed in 2002 and since the installation six (6) micro-turbines have been replaced with 4 new units and 2 used units. Micro-turbines have a limited life and when failure occurs these units typically cannot be rebuilt and must be replaced. Additionally, good operational "used" units are getting harder to find. Therefore, replacement of the units will be with a new and state certified type. Recently, EMWD received 17 additional micro-turbine units from SCAQMD that are not state-certified and would not qualify for the proposed permit exemption in the rule. Thus, EMWD would be required to permit all of these units, which includes the recently received 17 micro-turbines and the 9 existing units, at an estimated cost between \$20,000 and \$40,000.

6-3

Passive Carbon Odor Scrubber Modification

EMWD concurs with the SCAP comment letter dated July 20, 2008 in regards to the clarification that odor control units are usually voluntary, done in part as a good neighbor policy and should not be subject to VOC requirements. EMWD would like to utilize passive carbon scrubber units for odor control without strict rule restriction in neighborhoods where sewer lines transverse through as well as within the wastewater treatment facilities. Limiting the size to 55 gallons becomes an issue when designing a unit within a certain location either in a neighborhood or wastewater facility. Again, the goal for such units is primarily "voluntary" odor control.

6-4

Mr. Don Hopps
August 3, 2012
Page Three

Therefore, EMWD would recommend that the size restriction in Rule 219 section (d)(10) be removed and the use of these units for wastewater facilities be included in permit exemption.

Thank you for the opportunity to comment. If you have any questions, please feel free to contact Al Javier at (951) 928-3777 extension 6327 or at javiera@emwd.org.

Sincerely,



Jayne Joy, P.E.
Director of Environmental and Regulatory Compliance

JJ/ARJ:tlg

cc: Records Management

6-4
Cont'd

Response to Comment #6-1

Staff appreciates the comment letter from the Eastern Metropolitan Water District (EMWD) addressing the Micro-turbines and the passive odors scrubbers. Staff has had several meetings with public service facility stakeholders in regard to crafting rule language for passive carbon odor scrubbers.

Response to Comment #6-2

Please note that staff has modified the proposed rule to ensure that the restructured exemption applies prospectively to new installations and not to already installed units. Please see Response to Comment #1-1.

Response to Comment #6-3

Please note that staff has modified the proposed rule to ensure that the restructured exemption applies prospectively to new installations and not to already installed units. Please see Response to Comment #1-1.

Response to Comment #6-4

After several meetings with stakeholders including the commenter, staff has revised the rule language for Rule 219 (d)(10) as follows: “Passive carbon adsorbers with a maximum capacity of no more than 120 gallons, without mechanical ventilation used exclusively for odor control at wastewater treatment plants or sewer collection systems, including sanitary sewers, manholes and pump stations.” Staff believes the new proposed rule language will address the concerns of the stakeholders.



MPE SERVICES, INC.

Mechanical & Process Engineering Consultants

3030 Armstrong Drive • Corona, CA 92881
Phone (951) 735-4418 • Fax (951) 735-4463
www.mpeservicesinc.com

August 3, 2012

Mr. Don Hopps
Planning, Rule Development & Area Sources
21865 Copley Drive
Diamond Bar, CA 91765

Re: BioGreen360 Organic Decomposing Machine

Dear Mr. Hopps,

We are a Process Engineering Consulting firm located in Corona, California. www.mpeservicesinc.com We have partnered with a company named Green Waste Stream, LLC out of Stratham, New Hampshire. We have been developing a machine called the BioGreen360 that is a self-contained, continuous feed organic waste disposal system designed to convert food waste into a viable soil amendment.

www.biogreen360.com The machine takes organic waste and microbially reduces the volume by 90%. The discharge from the machine is a solid discharge with varying moistures. Our "definition" of organic waste is anything that the human body can consume, such as fruits, vegetable, table scraps, bread, meat, fish, dairy products, etc.

The way the machine works is the organic waste is dumped into a hopper where it is mixed with a microbial formula that needs replacement once a year. The hopper where the organic solution is mixed together is a controlled environment where the microbes can grow. The by-product from the microbes is discharged into the machine's sump at which time this slurry is pumped into a Radiator (cooking chamber) where the product is heated to over 280 degrees for approx. 2 to 2-1/2 hours, effectively killing all pathogens and bacteria. After approx. 24 hours, the organic waste has been reduced by approx. 90% and can be considered a bio-sterile mass. This discharged product can vary in moisture and it is approx. 80 - 90% dry. We are basically cooking the moisture out of the organic waste.

The original intent of the decomposer was to reduce the amount of organic waste going to the landfills. We are working on developing the discharge of the machine into a compostable product. We are also working to develop the discharge and use it as a supplement to Animal Feed.

Back East, it has been mandated (Jan, 2012) that their organic waste needs to be separated from their regular trash and be recycled. Our company, MPE Services has

7-1

begin manufacturing these machines and they are being sold on the East coast since September, 2011. We understand that with the passage of California Assembly Bill 939, Bill 32, or Bill 341 (July1, 2012), there will be a need to create more options to recycle organic waste in California. <http://www.calrecycle.ca.gov/> Much of the diverted organic waste is being brought to compost piles which the AQMD also regulates. The BioGreen360 machine is a possible solution in eliminating the emissions and ground water contamination issues that these compost piles may have.

7-1
Cont'd

We are setting up a marketing team here in Corona, BioGreen Organic Solutions (BioGos), so that we can begin selling these machines here in California. www.biogos.com We have been in contact with the AQMD to inquire about the need to comply with any requirements of permits for our machine. We have potential customers asking if an AQMD permit is required.

7-2

In looking further at Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II, we feel that we fall under the category of (i) Pharmaceuticals, Cosmetics, and Food Processing and Preparation Equipment.

We would like for you to consider adding Organic Decomposing Machines like ours to your list of equipment that doesn't fall under the category of requiring a permit for the following reasons:

- 1) Our maximum horizontal inside cross-sectional area is 15.59 square feet which does not exceed the 2 square meters (21.5 square feet) specified under units like "Smoke Houses".
- 2) The product in the composter is all organic edible food type products.
- 3) We are basically cooking all of the free/bound moisture out of the food.
- 4) We do not add water or liquids to the machine.
- 5) We do not add any type of chemicals to the machine.

7-3

We have attached the following additional information:

- 1) PP1.1 Equipment Process Flow Chart
- 2) Compost Analysis Report – University of Maine Test Results
- 3) Compost Analysis Report – University of Vermont Test Results
- 4) Byproduct Test Results – Maine Environmental Laboratory
- 5) Picture of the BioGreen360 machine
- 6) Brochure of the BioGreen360 machine

Please contact me for any additional information that you may need or if you would like to discuss this further. Thank you for your time and consideration.

Sincerely,



George Bennett
President

Response to Comment #7-1

Staff is quite interested in the operation for the Bio Green 360 composting equipment but has concerns in regard to what levels of emissions the equipment produces. District permitting staff discussed their concerns about potential emissions with the commenter. However, to date, requested emission data is not available, therefore is not included in the current proposed rule amendment, but may be considered at a later time when emissions data is available.

Response to Comment #7-2

The Bio Green composting equipment may require a permit to operate dependant on the potential emissions data and profile. A written permit is normally required for emission producing equipment or equipment controlling the emissions of emissions producing equipment. This equipment would have to go through an engineering analysis to determine the final disposition of whether the equipment could be given an exemption of require a written permit before the equipment can be installed and operated. Staff understands that this process has already been initiated for this equipment.

Response to Comment #7-3

AQMD permitting staff does not support an exemption from permit for the Bio Green 360 equipment due to the lack of potential emissions data from this equipment. Permitting staff needs to quantify the type and amounts of emissions produced before a determination on the Bio Green 360 equipment can be made.

The following comments are from SCEC – Comment Letter #8



August 3, 2012

Mr. Don Hopps
South Coast AQMD
21865 Copley Drive
Diamond Bar, CA 91765

Subject: Comments Regarding the Proposed Amended Rule 219

Mr. Hopps:

SCEC is providing the following comments regarding the proposed amendments to Rule 219. These comments include recommendations for the exemption of equipment which SCEC feels are insignificant sources of air pollution – namely, downflow booths and small grinding equipment (i.e. mills). The requirement for a permit on these devices not only creates a financial burden for businesses in the pharmaceuticals manufacturing industry (i.e. permit processing and renewal fees), but it also creates logistical problems for these businesses; complying with permit limits and maintaining the associated recordkeeping activities for these devices is impractical.

SCEC believes that the currently proposed language either does not provide sufficient clarification to allow a particular type of equipment to take an exemption, or said equipment is made ineligible for exemption based on its function or the types of materials it processes.

Comments:

1. Rule 219(c)(9) – this subsection of the proposed amended rule exempts “hoods, stacks, or ventilators”. SCEC feels that “downflow booths” should also be specified in this exemption language. If not specifically called out as exempt, SCEC would like the District to provide clarification in the staff report to indicate that it is the intent of the Board to allow downflow booths to be included in the exemption.

At many pharmaceutical manufacturing facilities, and possibly within other industrial sectors, downflow booths are used as a means to protect workers during dry powder material transfer operations, and to reduce the probability of cross-contamination within the facility. These businesses commonly employ downflow booth technology to actively vent an area within a production facility. These devices do not control VOC emissions (nor are VOC containing materials processed in them), and are typically equipped with a variety of solid material filters – i.e. prefilters and high efficiency particulate arresting

1582-1 N. Batavia St. • Orange, CA 92667 • (714) 282-8240 • (714) 282-8247 – Fax
www.scec.com

8-1

8-2

Mr. Don Hopps
South Coast AQMD

(HEPA) filters. The device itself can be small or large, but all of these systems are designed to isolate any fugitive particulate matter, and keep it from escaping into the room which houses the system. This is done using controlled air circulation and filters.

8-2
Cont'd

In addition to basic material handling operations, such as material transfer between storage bins, these systems can also be used to control fugitive particulates from product grinding operations (using small mills or comminutors). Regardless of the nature of the activity within the downflow booth, it is basically acting as a ventilation system. In fact, the concept of the downflow booth is similar to a lab hood, or other hood device which might vent a particular operation, save for the fact that some of the air is recirculated after being filtered.

8-3

SCEC believes that the District should provide clarification to allow for exemption of these types of downflow booth systems. Given that they serve the same purpose as a hood or ventilator, but with a more robust filtration system for fugitive particulates, it appears that they should receive the same type of exemption from written permit.

2. Rule 219(i) – There are several comments for this section of the rule which deals with exemptions for pharmaceuticals, cosmetics, and food processing or preparation equipment.

Subsection (4) exempts specific grinding, blending, or packaging equipment, contingent upon facility VOC-containing solvent usage. This part of the rule also specifies that the equipment must be processing certain food or cosmetic materials in order to qualify for the exemption. Currently, there is no equivalent exemption for similar equipment used to process pharmaceutical materials – particularly grinding equipment, even though these devices are functionally identical.

A pharmaceuticals manufacturing operation can include many small milling devices used to grind pharmaceutical granules and powder materials to achieve a desired uniformity and size. The facility may have dozens of these devices, which can be wheeled around to various production rooms within the plant on an as-needed basis.

8-4

Typically, these devices have a small 1-2 cubic foot hopper, which feeds into a mill. These are pass-through devices where there is no actual internal reservoir for the materials once processed – i.e. materials are fed into the machine from a storage bin or other container, passed through the mill, and immediately discharged into a new storage bin (which is placed under the mill before the operation begins). These machines usually have a 3-7 horsepower electric motor which drives the mill process. Milling operations may last for several minutes to an hour, depending on the amount of material to be processed.

Mr. Don Hopps
South Coast AQMD

Although Rule 219(k)(4) exempts “grinding” equipment, it is based on the use of liquids in the machine. While certain mills may perform “wet mill” type operations, many others are used exclusively for the processing of dry materials. For those devices which are capable of performing both wet and dry milling operations, they cannot take the current exemption because of the dry milling function. Dry material milling operations do not incorporate the use of VOC containing solvents, and they are usually performed within a production facility. Pharmaceutical manufacturing facilities in particular have robust dust collection (or filtration) systems tied into the building air handling process to control all air leaving the facility. This is done primarily to avoid expelling pharmaceutical products which might impact the surrounding community, but also serves as emission control for fugitive particulate matter released within the building.

Furthermore, since the devices are all functionally identical and can be wheeled around on an as-needed basis, they are used interchangeably in most cases. This makes estimation of throughput in any one device very difficult. It is not necessarily appropriate to incorporate an assumed emission profile for each one of these devices into the overall facility NSR balance. In a facility which incorporates BACT for solid materials handling operations (i.e. baghouse, HEPA filtration, or dust-collector system), these devices are not considered to be significant sources of fugitive particulate matter.

Also, the cost of permitting and maintaining permits on these types of devices is disproportionately large compared to the potential air quality benefit of regulating the sources – particularly in facilities with robust filtration systems built in to control fugitive particulate matter. Being a schedule B type device, each mill would cost more than \$2000 in AQMD fees to permit. Each permit would also need to be renewed annually at a cost of several hundreds of dollars. This is just the cost of AQMD fees to acquire and maintain the permits; the AQMD must also consider the cost to a business for ensuring that the proper recordkeeping practices are being used, or any other required activities are being performed to demonstrate compliance with permit conditions.

Regarding emissions, SCEC believes that these devices are insignificant sources of air pollution. As an example, a single unit may process 10,000 pounds of powder material in a given day. If the facility is only equipped with a filtration system which is 95% efficient for the capture of PM10, and using an emission factor of 1 lb PM10/ton powder material processed, the end result is approximately 0.25 lbs PM10/day. Assuming a 5-day work week, 52 weeks of operation per year, and that the machine is used each day the facility operates, the result is 65 lbs PM10/year. If a more effective PM10 control system is employed at the facility (i.e. HEPA filtration; ~99.97% control efficiency for PM10), this emissions profile could be as low as 0.0015 lbs PM10/day and less than a pound per year of PM10. Even when a facility has multiple milling units, the emissions implications will be very small, as demonstrated in the above example.

8-5

8-6

Mr. Don Hopps
South Coast AQMD

For the reasons stated above, SCEC requests that the District considers the addition of new language which would allow these small, mobile, milling devices used in pharmaceutical manufacturing operations to be exempted from written permit when VOC solvents are not used in the equipment. This exemption would be located in either section (i) or (k) of the proposed amended rule, and it could be structured to resemble similar exemptions given to other equipment, such as pharmaceuticals tableting or packaging equipment – i.e. contingent upon the use of VOC containing solvents in the machine. It may also be appropriate to specify that the exemption applies only to pharmaceutical manufacturing operations, and/or to those operations which are contained within a facility or areas of a facility equipped with fugitive particulate control systems. If the District wishes to place some sort of material throughput limit on a device in order to qualify for the exemption, in those cases where a facility may not be equipped with such fugitive particulate controls, that may also be appropriate.

8-6
Cont'd

In conclusion, SCEC believes that there are opportunities to incorporate certain types of equipment, which are commonly used in the pharmaceuticals manufacturing industry, into the provisions of Rule 219, thereby exempting these negligible emission sources from written permit. Whether it is a ventilation system designed for worker safety and to avoid product contamination, or small process equipment units with relatively insignificant potential emissions, SCEC would like to point out that these devices are currently subject to permit under District rules. The costs of permitting (and maintaining compliance with permit conditions) on the industry seems disproportionately large relative to the potential benefit of controlling the emissions from such devices through the AQMD's permit program.

8-7

Presented in Figure 1 and Figure 2, SCEC is providing some representative photos of the equipment discussed herein.

Mr. Don Hopps
South Coast AQMD

**FIGURE 1
DOWNFLOW BOOTH SAMPLE**



1582-1 N. Batavia St. • Orange, CA 92667 • (714) 282-8240 • (714) 282-8247 – Fax
www.scec.com

Mr. Don Hopps
South Coast AQMD

FIGURE 2
MOBILE GRINDING EQUIPMENT



1582-1 N. Batavia St. • Orange, CA 92667 • (714) 282-8240 • (714) 282-8247 – Fax
www.sceec.com

August 3, 2012

7

Mr. Don Hopps
South Coast AQMD

Should the District have any questions or concerns regarding the comments presented in this document, please feel free to contact me directly at (714)282-8240 x30.

Best Regards,
SCEC



Bill Winchester
Project Manager

cc. Mr. Mohan Balagopalan
(SCAQMD)

1582-1 N. Batavia St. • Orange, CA 92667 • (714) 282-8240 • (714) 282-8247 – Fax
www.scec.com

Response to Comment #8-1

Rule 219, under the “purpose” paragraph, does provide clarification for which types of equipment will meet the exemption provided in the rule. Rule 219 subparagraph (c)(9) provides an exemption for hoods, stacks and ventilators but not down draft booths because down draft booths are an emission control device and are used to collect particulates through filtered media.

Response to Comment #8-2

Staff has not provided a specific exemption for down flow booths in Rule 219 paragraph (c)(2). Down flow booths are equipped with exhaust filters that collect particulate and because they are an emission control device, they are required to be permitted. Rule 203 subdivision (a) states “A person shall not operate or use any

equipment or agricultural permit unit, the use of which may cause the issuance of air contaminants, or the use of which may reduce or control the issuance of air contaminants, without first obtaining a written permit to operate from the Executive Officer or except as provided in Rule 202.”

Response to Comment #8-3

The down draft booths, used for particulate control during grinding operations, qualify as a particulate control device and are required to be permitted. The down draft booths are somewhat similar to a hood or a ventilator but as the commenter points out, they are equipped with a “more robust filtration system for fugitive particulates.” Staff’s opinion is that the down draft booths qualify as an emission control device and are required to be permitted and cannot be given an exemption in proposed amended Rule 219.

Response to Comment #8-4

The current version of Rule 219 subdivision (i) is intended for pharmaceutical, cosmetics, and food processing and preparation equipment; however, the exemption under paragraph (i)(4) is provided for *tea, coffee, cocoa, roasted coffee, flavor, fragrance extraction, dried flowers and spices and they can only produce less than one gallon per day, or 22 gallons per month, of VOC containing solvents*. The exemption was not intended to exempt pharmaceutical grinding operations.

Response to Comment #8-5

The active and current version of Rule 219 paragraph (k)(4) is intended for blending grinding, mixing, or thinning liquids to which powders are added with a capacity of 251 gallons or less and no supplemental heat is added or no ingredient that exceeds 135 °F is added. However, the grindings of pharmaceutical products produces particulate, which must be collected with an emissions control device. As the commenter points out the “robust dust collection” is primarily used to “avoid expelling pharmaceutical products which might impact the surrounding community, but also serves as emission control for fugitive particulate matter released within the building.”

Response to Comment #8-6

Staff disagrees with the exemption proposed for grinding operations on pharmaceutical products based on the lack of source test data to validate any real particulate emissions coming from the operation. Furthermore, staff does not know the real impacts of several grinding machines operating together. If data from a source test were available that would identify actual emissions generated from such grinding operations, a potential exemption may be considered in further amendments to Rule 219.

Response to Comment #8-7

See response to comment #8-6.



August 3, 2012

Mr. Don Hopps
Planning, Rule Development & Area Sources
South Coast Air Quality Management District
21865 Copley Drive Diamond Bar, CA 91765

Subject: Comments - PAR 222 (Filing Requirements for Specific Emission Sources Not Requiring A Written Permit Pursuant To Regulation II)

Dear Mr. Hopps:

The California Small Business Alliance (Alliance) is a coalition of trade associations representing approximately 14,000 small businesses with approximately 750,000 employees who work in the state's manufacturing, construction, oil and natural gas, and service sectors. The Alliance was created by these associations to advocate on their behalf before all branches of government, including environmental regulatory agencies.

Our purpose for writing is to comment on the South Coast Air Quality Management District's (District) proposal to amend Rules 219 (*Equipment Not Requiring A Written Permit Pursuant To Regulation II*) and 222 (*Filing Requirements for Specific Emission Sources Not Requiring A Written Permit Pursuant To Regulation II*), which will expand the list of equipment covered by these rules; thereby simplifying and streamlining the administration of the permit system.

Hundreds of Alliance-member businesses, and thousands of other small businesses, have been adversely impacted by the District's Rule 1147 (*NOx Reductions from Miscellaneous Sources*) ever since it was first adopted in 2008. Regrettably, hundreds of small businesses continue to be adversely impacted notwithstanding the rule being amended in September 2011, ostensibly for the purpose of correcting certain deficiencies in the rule, and the promise that some semblance of relief would be afforded to affected small businesses.

Because many small business owners still find the technical basis behind Rule 1147 grossly deficient, unreasonably demanding and, in many instances, impossible to comply with, we have been urged by our members to ask the District's staff to earnestly consider expanding the list of equipment that is currently being contemplated for inclusion in the Rule 222 filing program. Specifically, we are

273 North Spruce Drive • Anaheim, CA 92805-3447

Telephone: (714) 778-0763 • Fax: (714) 778-0763

Website: <http://www.calsmallbusinessalliance.org>

9-1

9-2

California Autobody
Association

California Cleaners
Association

California Film Extruders
& Converters Association

California Furniture
Manufacturers Association

California Independent
Petroleum Association

Construction Industry
Air Quality Coalition

Korean Drycleaners-Laundry
Association of Southern California

Metal Finishing Association
of Southern California

Printing Industries
of California

Screenprinting & Graphic Imaging
Association International

Southern California
Rock Products Association

referring to gaseous and liquid fuel fired combustion equipment, as defined in Rule 1147, with individual fuel usage profiles of one pound or less of NOx emissions per day. Examples of these are spray booth heaters, dryers, and ovens, and heaters and dryers on printing presses.

We would be negligent if we didn't remind the staff of the reports from a multitude of concerned small business owners, and consultants, given over the past year or more at meetings and hearings on Rule 1147 about the unavailability of feasible and affordable technology for their unique applications. Some of these small business owners find themselves confronted by fairly imminent and impossible compliance deadlines under the rule. We strongly urge the staff to also consider these situations for acceptance into Rule 222.

As the staff so clearly pointed out at the July 19th Public Workshop, and at the July 27th briefing to the Stationary Source Committee, Rule 222 provides a simplified filing process in lieu of permitting for certain equipment that have a low emissions profile. It is this very same equipment with low emissions profiles of one pound or less of NOx emissions per day that we propose be considered for inclusion in the upcoming amendment of Rule 222. Suffice it to say that we were greatly encouraged when the members of the Stationary Source Committee expressed their support of our proposal.

On balance, it is because of the business environments in which so many of these units are used either infrequently or at low production levels that makes permitting an exorbitant expense and daily recordkeeping an intrusive administrative burden.

We would be remiss if we did not point out that under Rule 1147, the cost to retrofit a conventional burner to an approved low NOx burner in many, if not most, of these smaller heaters, dryers, and ovens is the same as it is for heaters, dryers, and ovens contained in units with demonstrably higher operating histories of producing more than one pound per day of NOx emissions.

Finally, it is both necessary and appropriate to mention that the total cost of retrofitting a single burner and enclosure in the myriad of applications used in these small businesses can easily be in the range of \$30,000 to \$50,000 or more.

Thank you for the opportunity to comment.

Very truly yours,


Gary Stafford
President


Bill La Marr
Executive Director

9-2
Cont'd

9-3

9-4

9-5

Response to Comment #9-1

The scope of the amendment to Proposed Amended Rule 222 is to streamline the permitting system by identifying small emission sources that are currently permitted and transitioning these sources from their current permitted status into the Rule 222 filing program, along with their current operating conditions. AQMD staff has identified and evaluated several categories of equipment that will be proposed to be moved from their current written permitted status and into the Rule 222 filing program, with numerous equipment categories under Rule 1147 applicability. At the same time, staff is amending Rule 219 to address other issues which have been raised by business and engineering and compliance staff.

Response to Comment #9-2

The inclusion of additional equipment in the Rule 222 filing program and amendment of Rule 219 is being done as a response to issues raised by local business. These proposed amendments are the first step in the reevaluation of sources affected by Rule 1147. The following list of equipment includes mobile construction and maintenance equipment for which it is more difficult to implement the low NOx technologies used on stationary construction equipment such as staged fuel combustion and premixing air and fuel using electric fans and higher gas pressures. In addition to addressing technical feasibility issues relating to equipment currently affected by Rule 1147, staff is addressing issues relating to Rule 219 for small food ovens, fuel cells, micro-turbines, and engines and boilers in remote locations. The following is a list of categories of equipment affected by the proposed amendments:

- Asphalt day tankers that have a maximum capacity greater than 600 liters (159 gallons) but no more than 18,925 liters (5,000 gallons), equipped with a demister and burner(s) that fire exclusively on liquefied petroleum gases;
- Asphalt Pavement Heaters used for road maintenance and new road construction;
- Diesel fuel boilers that have a rated maximum heat input capacity of no more than 2,000,000 Btu/hour and are located more than 4,000 feet above sea level or more than 15 miles offshore and are in operation prior to the [Date of adoption].
- Food convection ovens that are exclusively fired on natural gas and have less than 2,000,000 Btu /hour or less, and where the VOC emissions from yeast fermentation are less than one pound per day
- Fuel cells equipped with a heater producing supplemental heat with a rated heat input capacity of 90,000 therms per year or less.
- Micro-turbines with a rated maximum heat input capacity of 3,500,000 Btu/hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation with the state of California or were in operation prior to the [Date of Adoption].
- Portable diesel fueled heaters that have a rated maximum heat input capacity of 250,000 Btu/hour or less.
- Portable power pressure washers and hot water or steam washers and cleaners that have heaters or burners that have a maximum rated heat input capacity of 500,000 Btu/hour or less and use no more than 50 gallons of fuel per day.
- Tar pots with a maximum storage capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and equipped with burner(s) that fire exclusively on liquefied petroleum gases.
- Piston-type internal combustion engines, with a manufacturer's rating of 2100 brake horsepower or less, that is used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius.

This recommendation is based, in part, on results of the first phase of the Rule 1147 Internal Technology Assessment being conducted as part of Rule 1147 implementation. As additional phases of those technology assessments are completed, and based on findings, small gaseous fired heaters for paint spray booths may be considered in future rule amendments.

Response to Comment #9-3

See response to Comment #9-2. The focus of the current proposed amendments to Rules 219 and 222 are to address long standing issues relating to Rule 219 and to address technical feasibility issues for mobile equipment subject to Rule 1147.

Response to Comment #9-4

See response to Comment #9-2. The permit fees for Rule 1147 compliance have been reduced significantly. In addition, the recordkeeping component of Rule 1147 was amended to address the request of industry to allow simple recordkeeping of hours of use or gas use to document emissions of less than one pound per day.

Response to Comment #9-5

See response to Comment #9-2. These amendments are reducing businesses costs.

The following comments are from WSPA – Comment Letter #10



Western States Petroleum Association
Credible Solutions • Responsive Service • Since 1907

Patty Senecal
Manager, Southern California Region and Infrastructure Issues

VIA ELECTRONIC MAIL

August 3, 2012

Don Hopps.
Planning, Rule Development, and Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Dear Mr. Hopps:

WSPA COMMENTS ON PAR 219, EQUIPMENT NOT REQUIRING A WRITTEN PERMIT

Western States Petroleum Association (WSPA) is a non-profit trade association representing twenty-seven companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in California, Arizona, Nevada, Oregon, Washington and Hawaii. WSPA-member companies operate Retail Gasoline Outlets and other facilities in the South Coast Air Basin that will be impacted by the final requirements of Rule 219

WSPA appreciates the opportunity to submit these comments on the District's currently proposed amendments to Rule 219.

WSPA strongly support the addition of the following categories of equipment to the slate of equipment that is exempt from the requirement for a written permit pursuant to Regulation II:

(b)(3) Power pressure washers, portable hot water or steam washers and cleaners per the criteria stated in the paragraph.

(p)(22) Equipment used to recycle aerosol paint cans per the criteria stated in the paragraph.

WSPA appreciates the opportunity to submit these comments. Please contact me with any questions at (310) 678-7782, or, psenecal@wspa.org.

Sincerely,

A handwritten signature in cursive script that reads "Patty Senecal".

970 W. 190th Street, Suite 770, Torrance, California 90502
PHONE: (310) 678-7782 • FAX: (310) 324-9063 • PSenecal@wspa.org • www.wspa.org

10-1

Response to Comment #10-1

The District appreciates your comments. Your comments have been addressed in Responses to Comments #3-2 and #1-2.

The following comments are from Beta Offshore – Comment Letter #11



August 3, 2012

Mr. Don Hopps
South Coast Air Quality Management District
Planning, Rule Development, & Area Sources
21865 Copley Drive
Diamond Bar, CA 91765

RE: PROPOSED AMENDED RULE 219
EXEMPTION FOR IC ENGINES WITH PERP REGISTRATIONS

Dear Mr. Hopps:

The noticed intent of the current proposed amendments to Rule 219 states that *“staff intends to make revisions to some paragraphs of the current rule language to clarify the intent of the existing exemptions and include minor clarifications and editorial corrections to the rule.”* In this regard, Beta Offshore requests clarifying language be added to paragraph (b)(6) of the rule, which exempts portable internal combustion (IC) engines with PERP registrations from requirements to obtain a permit.

Paragraph (b)(6) currently reads as follows:

Portable internal combustion engines, including any turbines qualified as military tactical support equipment under Health and Safety Code Section 41754, registered pursuant to the California Statewide Portable Engine Registration Program.

We request the addition of language to make paragraph (b)(6) read as follows (requested added language shown in underscore):

Portable internal combustion engines, including any turbines qualified as military tactical support equipment under Health and Safety Code Section 41754, registered pursuant to the California Statewide Portable Engine Registration Program, including the use of such engines at locations where PERP registrations are otherwise not valid (e.g., within the Outer Continental Shelf) as long as the engines are operated in compliance with all other conditions in the current PERP registrations.

In the case of an IC engine with a current PERP registration that is planned to be used at a location where the registration is not valid (e.g., in the Outer Continental Shelf (OCS)), it is currently not clear whether the exemption from permitting provided by paragraph (b)(6) is valid. It could be interpreted to mean that, because the engine has a current PERP registration, it is exempt from District permitting requirements. However, PERP registrations contain a condition

11-1

11-2

111 W. Ocean Blvd., Ste 1240 | Long Beach, CA 90802 | Office: 562-628-1526 | Fax: 562-628-1536

that explicitly states the registration is not valid in the OCS. In this case, would the exemption provided by paragraph (b)(6) still be valid?

11-2
Cont'd

We have posed this question to various District staff members, including both enforcement and permitting staff, and have received conflicting answers. Thus, it appears that even District staff personnel do not consistently interpret the intent of this exemption in the case of an IC engine that will be used at a location where the PERP registration is not valid.

In the specific case of Beta Offshore, which operates three offshore oil and gas production platforms in the OCS that are subject to District rules and regulations, the proposed clarification to the existing language is important. If the exemption in paragraph (b)(6) is not valid for an IC engine with a PERP registration that is not valid in the OCS, the additional planning, time, and expense associated with obtaining a District permit for such an engine is a significant burden. The need for such an engine is often of a sudden, unanticipated, and short-term nature. In cases where the engine is needed to perform a maintenance function, delays in performing the needed maintenance can result as well as the potential need to shut down other equipment and processes if the maintenance is necessary to maintain compliance with applicable permit requirements. As a result, this tends to place Beta Offshore at a competitive disadvantage with respect to operators of other oil and gas production facilities within the District's jurisdiction. Specifically, Beta Offshore, solely because of its facility's location in the OCS, is required to obtain a District permit for such an engine while its competitors located onshore or in State Territorial Waters are not. Because the emissions impacts of the use of such an engine within the South Coast Basin are essentially the same whether it is used onshore, in State Territorial Waters, or in the OCS, the additional permitting burden is without a corresponding benefit to air quality.

11-3

Again, Beta Offshore requests that language be added to paragraph (b)(6) that will clarify the exemption is applicable to IC engines with PERP registrations, even when used at locations (under the jurisdiction of the District) where the PERP registration is otherwise not valid.

11-4

Thank you for your consideration of this request. If you need any further information or would like to discuss this matter further, please contact Beta Offshore's HSE Manager, Ms. Marina Robertson via phone at 562-628-1526 or via e-mail at mrobertson@betaoffshore.com.

Sincerely,



For:

Steve Liles
Executive Vice President and Chief Operating Officer

111 W. Ocean Blvd., Ste 1240 | Long Beach, CA 90802 | Office: 562-628-1526 | Fax: 562-628-1536

Response to Comment #11-1

Proposed Amended Rule 219 paragraph (b)(6) exempts from AQMD permitting requirements all portable engines and equipment units registered in the Portable Equipment Registration Program (PERP) by the California Air Resources Board (CARB). The language of PAR 219 (b)(6) mirrors that of the PERP regulation, developed by CARB to allow operation of certain portable engines and equipment units under statewide registration as a voluntary alternative to operating under district-specific permits. As you have correctly noted, not all portable engines are eligible for PERP registration [PERP §2451 (c)]; among those specifically excluded from eligibility are “any [portable] engine or equipment unit operating within the boundaries of the OCS” [PERP §2451 (c)(5)].

If a PERP registration cannot be issued for a portable engine operating within the OCS, no PERP registration conditions exist for that use; likewise, if a PERP registration issued for an allowable use is deemed invalid for use within the OCS, so are its conditions invalid for that unallowable use. Because portable engines are not eligible for operation within the boundaries of the OCS, they are subject to AQMD permitting requirements. In addition to the requirements of AQMD Regulation II – Permits, OCS sources are also subject to the requirements of 40 CFR Part 55 as incorporated into AQMD Rule 1183 (“*All OCS sources located within 25 miles of the State's seaward boundary and for which the District has been designated as the corresponding onshore area (COA) shall comply with the standards, criteria, and requirements set forth herein.*”) 40 CFR Part 55.6 specifically addresses permitting requirements for OCS sources.

Response to Comment #11-2

Please see *Response to Comment #11-1* above. If a specific condition of a PERP registration issued for an IC engine precludes a particular use of the engine, that use is automatically subject to permitting requirements of the local air district. The PERP registration condition at issue is simply a restatement of PERP §2451 (c)(5), which excludes “*any [portable] engine or equipment unit operating within the boundaries of the OCS*” from operating under PERP, thereby subjecting such engines and equipment units to local air district permitting requirements. AQMD staff responsible for implementing and enforcing the PERP program is available to discuss this matter with you further and may be contacted toll-free at 1-877-810-6995 or at perp@aqmd.gov.

Response to Comment #11-3

Please see *Response to Comment #11-1 and #11-2* above.

Response to Comment #11-4

Please see *Response to Comment #11-1 and #11-2* above. Staff believes the current rule language is clear and does not agree that there is need for additional rule language.

The following comments are from Capstone – Comment Letter #12



21211 Nordhoff Street • Chatsworth, CA 91311 • Tel. 818.734.5300 • Fax 818.734.5320
www.capstoneturbine.com

August 3, 2012

Mr. Don Hopps
South Coast Air Quality Management District
Planning, Rule Development & Area Sources
21865 Copley Drive
Diamond Bar, CA 91765

Thank you for the opportunity to comment on its proposed changes to Rule 219 and Rule 222.

Introduction to Capstone Turbine Corporation

Capstone Turbine Corporation® is the world's leading producer of low-emission microturbine systems, and was first to market with commercially viable air bearing turbine technology. Founded in 1988, the company has shipped over 6,500 Capstone turbines to customers worldwide. These award-winning systems have logged millions of documented runtime operating hours.

Capstone Turbine manufactures and assembles all of its microturbines in Chatsworth and Van Nuys. We employ over 200 people most of which are trained in highly-skilled, technical positions. Our company is in a significant growth mode, posting revenue increases of thirty to forty percent year-on-year for five years in a row, much of that growth taking place during the economic downturn. Annual revenues in our last completed fiscal year exceeded \$110 million.

Our strength and our future potential are based on our unique technology. Capstone's microturbines run on air bearings which eliminate the need for any oil or lubricant within the system. The Capstone microturbine has only one moving part which significantly simplified maintenance and reduces the likelihood of equipment failure. Throughout our history Capstone has endeavored to make the most reliable and low-emission microturbines possible.

Why Customers Choose Capstone

Capstone's customers choose microturbines for a variety of reasons. Sixty percent of Capstone's customers are in the oil and gas sector, which highly values reliability and durability. Oil and gas customers install our product in remote and often hazardous environments, including hundreds of miles offshore. Commercial and industrial users adopt microturbines for their reliability, but these customers are also driven by their desire to save money on energy costs so they typically operate our systems in cogeneration or trigeneration applications. Our renewable fuel customers choose microturbines because they are a durable choice for creating power from biogas while producing very low emissions.

All of our customers value the ability of our product to provide reliable power with very low emissions. In particular, California companies have long selected CARB-certified microturbines as the technology of choice because it meets their energy and cost-saving needs while eliminating or reducing the need for local air permitting, thus making the process of installing clean distributed generation much easier.

Capstone's business is global. We do business in over fifty countries across the world, with exports constituting about half of our overall sales. In 2009, President Obama recognized Capstone's exporting success by awarding the company with the prestigious and competitive "E Award for Exporting." While the vast majority of sales come from outside California, Capstone still makes great efforts to make our products as competitive as possible in the local market, and is aggressive in growing our business in our home state.

Capstone Turbine's History with CARB

Capstone has deep experience working with CARB to certify its products to strict emissions requirements. Over the years, Capstone has successfully certified seven of its products to meet CARB requirements. These include the natural gas, landfill gas, and digester gas versions of the C65 and C200 microturbines, as well as the oil field waste gas version of the C65 microturbine.

Each certification has required considerable investment by Capstone in terms of financial resources, engineering resources and time. Depending on what emissions level is specified and what technology is currently available, the investment on one certification alone could be up to three years and exceed millions of dollars. Capstone has made these investments because we recognize the value in providing our customers with a cleaner power solution that would be simpler to permit and install. Capstone received the benefit of additional business, the customer benefited from a streamlined installation process, and the state of California benefited from cleaner air. Truly a win-win-win.

12-1

Current Changes to Rules 219 and 222

With the proposed changes to Rules 219 and 222, South Coast Air Quality Management District ("SCAQMD") seeks to make 3 changes to the rules, one of which believe will have negative impacts for our company, our customers and the State. We would like to note just for reference purposes that raising the regulation trigger to a heat input rating of 3,500,000 Btu/hr from the current level of 2,975,000 Btu/hr may erode a competitive advantage that Capstone has in South Coast market. However, we do believe that more microturbine product opportunities are good for the market overall.

12-2

What does greatly concern Capstone is shifting the point of regulation from an individual unit basis to a combined system basis. Capstone requests this change be deleted. Under the proposed rule, permitting would be required for any total system that exceeds the above heat input rating. This is a dramatic change from the current regulation which takes into account the heat input rating of individual units. Such a move appears to single out the Capstone C65 and C200 products, since under the current rule both products do

not require an air permit in SCAQMD, but under the proposed structure both products would require air permits. There is no other manufacturer that is impacted so dramatically by the proposed change. Furthermore, this proposed change inexplicably does not apply to fuel cells.

12-2
Cont'd

With regard to the proposed CARB certification requirement, Capstone is comfortable with this requirement for our natural gas products. As noted during our teleconference meeting, we are currently assessing the viability and expense of re-certifying expiring biogas products (landfill gas, digester and waste gas) under the stricter 2013 limits. It seems to us that the beneficial use of biogas as opposed to the alternate uses, whether it is methane seepage or flaring, should warrant special consideration. We will be working with CARB in the coming months on this analysis and would ask that biogas be given more flexibility from the CARB certification requirement. We ask that South Coast work with stakeholders such as Capstone to discuss what these requirements would be. A fair system that encourages biogas utilization for renewable power using clean conversion devices will bring pollution and GHG reduction benefits.

12-3

Finally, it would be helpful to get some clarification on how the current installed base of microturbines will be affected. Capstone has hundreds of microturbines installed at customers' locations in the South Coast. Addressing the "combined" issue may make this point moot but we feel further discussion on this topic is warranted.

12-4

Summary

Capstone greatly appreciates the opportunity to educate you on our products being marketed in the South, Coast, throughout California and around the world. We are generally supportive of the changes with the exception of the "combined" language and would respectfully request more flexibility on the CARB certification requirement for biogas. Thank you for taking the time to consider our comments.

12-5

Sincerely,



Justin Rathke
Vice President of Sales – Americas, Africa and Middle East

Response to Comment #12-1

Staff appreciates the commenter's concurrence.

Response to Comment #12-2

See Responses to Comment #1-1.

Response to Comment #12-3

The proposed rule language for Rule 219 paragraph (b)(1) seeks to provide an exemption for gas turbines and micro-turbines, with a cumulative power output of all such engines at a facility is less than two megawatts, provided that they are certified at the time of installation with the state of California and have a maximum heat input capacity of 3,500,000 Btu/hour or less. This is no restriction on the type fuel used to power the micro-turbine. However, the District cannot provide additional flexibility or leniency for a CARB certification requirement. The District can however, require more stringent requirements than CARB but not less. Nonetheless, staff has added a provision to clarify that the exemption applies to all micro-turbines in operation prior to the amendment.

Response to Comment #12-4

The District intends to grandfather-in the currently installed base of micro-turbines provided that they meet the criteria in the proposed rule language for Rule 219 paragraph (b)(1). The proposed rule language has been revised to reflect this change.

Response to Comment #12-5

Please see Response to Comment #12-3.

APPENDIX B: COMMENT LETTERS RECEIVED AFTER 8/3/12 CLOSING DATE

The following comments are from City of Corona – Comment Letter #13



City of Corona
Department of Water and Power
"Protecting Public Health"

Office: 951.736.2234
Fax: 951.735.3786

755 Corporation Yard Way
Corona, CA 92880 – www.discovercorona.com

August 6, 2012

Mr. Don Hopps
Air Quality Specialist
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: **REQUEST FOR BIOFILTERS AND CARBON FILTERS EXEMPTION IN SCAQMD RULE 219**

Dear Mr. Hopps:

Thank you for the opportunity to comment on the proposed SCAQMD Amendment Rule 219. The public workshop on Amendments to Rules 219 and 222 held on July 19, 2012 was both useful and informative. The City of Corona appreciates that your group was willing to have a follow-up meeting with us on July 25, 2012.

As was discussed at the meeting of July 25, 2012, the City of Corona would like SCAQMD to include waste water collection systems odor control devices (**Biofilters and Carbon filters**) in Rule 219 for the removal and neutralization of Hydrogen Sulfide (H_2S). This is a simple and effective odor control method which would use an electric motor to move malodorous H_2S gas through the filters.

The language for the addition to Rule 219 d (10) could read as follows:
"waste water collection systems odor control devices which are not covered by any other rule to remove undesirable H_2S odor from sewer pump stations, and sewer lines ..."

Or

Add Rule 219 d (13):
"Waste water collection systems odor control devices (Biofilters and Carbon filters) fitted with a...HP fan to remove undesirable malodorous H_2S gas from sewer pump stations, and sewer lines."

13-1

13-2

13-3

The City of Corona feels that our request above is reasonable and a great tool to eliminate bad Hydrogen Sulfide (H₂S) odor which emanate from the sewer systems during low flow periods and is vented to the atmosphere.

The City of Corona appreciates SCAQMD's cooperation in working with us to stay proactive in keeping our neighborhood malodorous free.

Please don't hesitate to contact me if you wish to discuss this matter further. I can be reached at (951) 817-5836 or by e-mail at Adoga.Kiharangwa@ci.corona.ca.us.

13-4

Sincerely,



Adoga Kiharangwa
Regulatory Compliance Supervisor

Response to Comment #13-1

Staff has conferred with AQMD permitting staff in regard to voluntary H₂S odor control systems after meeting with stakeholders on several different occasions. AQMD permitting staff do not support any changes to paragraph (d)(10) in Rule 219 because of a lack of examples and information, specifically emissions data, regarding “other control devices” and the sizes needed or intended for use. Active odor control systems can result in unintended consequences by potentially transitioning an area source into a point source.

Response to Comment #13-2

Staff appreciates the effort of the commenter to provide potential rule language for consideration; however, based on feedback from AQMD permitting staff, staff revised the rule language for Rule 219 paragraph (d)(10) as follows: “*Passive carbon adsorbers, with a maximum vessel capacity of no more than 120 gallons, without mechanical ventilation used exclusively for odor control from at wastewater treatment plants or sewer collection systems, including sanitary sewers, manholes and pump stations.*” Staff believes the revised language will address the passive odor control systems for water treatment plants and sewers, manholes, and pump stations.

Response to Comment #13-3

See comment #13-1 for staff's response to this comment.

Response to Comment #13-4

Staff continues to work with the wastewater treatment facilities in regard to H₂S odor control systems however, the odor controlling equipment must be designed and source tested to show it will perform as expected and properly control the H₂S odors, as well as VOC emissions before AQMD permitting staff will consider the equipment as a viable odor control system. These systems are control devices and pursuant to Rule 203 subdivision (a) they will continue to require permits to operate. Rule 203 subdivision (a) states “*A person shall not operate or use any equipment or agricultural permit unit, the use of which may cause the issuance of air contaminants, or the use of which may reduce or control the issuance of air contaminants, without first obtaining*

a written permit to operate from the Executive Officer or except as provided in Rule 202.” Rule 203 clearly mandates that emission control equipment requires written permit.

The following comments are from Yorke Engineering, LLC – Comment Letter #14

From: jadams.yorkeengr.com
Sent: Wednesday, August 08, 2012 4:23 PM
To: Don B Hopps
Cc: jyorke.yorkeengr.com
Subject: RE: SCAQMD PAR 219 & 222

Don,

Good afternoon. Paragraph (s)(1) of Rule 219 requires written permits for "equipment, process materials or air contaminants" subject to Regulation IX (NSPS), Regulation X (NESHAP), or state ATCM or Part 63 NESHAPs. Three recently adopted/amended federal rules, 40 CFR 60 Subparts IIII and JJJJ and 40 CFR 63 Subpart ZZZZ regulate engines that could otherwise be exempt from written permit per paragraph (b)(1) of Rule 219. We would like to request that subdivision (s) be modified as follows:

(s) Exceptions

Notwithstanding equipment identified in (a) through (r) of this rule, except for engines that would otherwise be exempt from written permit pursuant to paragraph (b)(1) of this rule, written permits are required pursuant to paragraphs (s)(1) and (s)(2) and filings under Rule 222 pursuant to paragraph (s)(3):

(1) Equipment, process materials or air contaminants subject to:

(A) Regulation IX – Standards of Performance for New Stationary Sources (NSPS); or

(B) Regulation X – National Emission Standards for Hazardous Air Pollutants (NESHAP - Part 61, Chapter I, Title 40 of the Code of Federal Regulations); or

(C) Emission limitation requirements of either the state Air Toxic Control Measure (ATCM) or NESHAP - Part 63, Title 40 of the Code of Federal Regulations; or ...

14-1

Thank you for your time.

James J (Jeb) Adams, CPP, CAPP
Mobile: (949) 573-7924
Office: (949) 248-8490 x231
E-mail: JAdams@YorkeEngr.com

Yorke Engineering, LLC
31726 Rancho Viejo Road, Suite 218
San Juan Capistrano, CA 92675
Phone: (949) 248-8490
Fax: (949) 248-8499
Web: www.YorkeEngr.com

The foregoing e-mail may contain proprietary, confidential and/or privileged information. Delivery of this message to anyone other than the intended recipient(s) is not intended to waive any confidentiality or privilege. If you have received this transmission in error, please alert the sender by reply e-mail and then delete this message and any attachments. Thank you

Response to Comment #14-1

Thank you for your comment. Staff's opinion is that the current language in Rule 219 (s) captures the requirement to permit engines consistent with NSPS and NESHAP requirements and a further exemption for engines is inappropriate.

The following comments are from SCEC – Comment Letter #15

From: [Bill Winchester](#)
To: bhopps@aqmd.gov
Cc: mhatapopalan@aqmd.gov
Subject: Additional Comment on PAR219
Date: Tuesday, August 14, 2012 10:06:00 AM
Importance: High

Mr. Hopps:

It is apparent that SCAQMD plans to change the language in Rule 219(i)(9) to base the exemption on VOC solvent use within the equipment, instead of the facility. SCEC agrees that this is appropriate. This exemption appears to be applicable to coating devices used to coat vitamins – i.e. tablets. SCEC would like to request that this language be revised to allow any tablet coating device to be eligible, assuming it meets the VOC solvent limits.

15-1

Currently, the language allows for vitamin manufacturers to get an exemption for equipment used for coating of their tablets; however, the pharmaceutical manufacturing industry also uses these types of coating devices. In fact, aside from the content of the tablet itself, there really doesn't seem to be a difference between the processes for coating vitamins, versus coating any other type of pharmaceutical tablet. While certain devices use VOC solvents in the coating solution, and may not be eligible, those devices using aqueous (water-only) solutions should be eligible for exemption.

15-2

This was probably already considered during the process to write in an exemption for vitamin coating equipment, but when you consider that only full tablets are being put into these devices, potential PM10 emissions would be insignificant. Assuming that only aqueous coating operations occur, there aren't any VOC emissions. Therefore, it is appropriate to include pharmaceutical tablet coating, or tablet coating operations in general, in the listed exemption. It is understood that the VOC solvent limit would still apply on an equipment unit basis, so those devices which utilize VOC solvent coating solutions would likely still be captured by the permitting program.

15-3

It is critical that this be evaluated, as currently there is a disparity in the permitting criteria for equipment/processes which may be functionally identical but used within different industries, as explained above.

Please contact me if you have any other questions or concerns.

Regards,

Bill Winchester
Project Manager

 **SCEC**
1582-1 N. Batavia St.
Orange, CA 92867

Desk: (714)282-8240 x30

Response to Comment #15-1

Staff has revised the rule language in Proposed Amended Rule 219 in paragraph (i)(9) and (i)(10) based on the equipment if using waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter. If a facility is not using waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter, a facility will have to limit the use of their product to less than one gallon per day or twenty-two (22) gallons per month of VOC containing solvents. Staff notes that the commenter addresses paragraph (i)(9)

which exempts coating vitamins and not tablets. However, paragraph (i)(10) does address coating pharmaceutical tablets.

Response to Comment #15-2

Staff agrees that waterborne solutions devoid of solvents should also be exempted and has incorporated revisions to address paragraphs (i)(9) and (i)(10).

Response to Comment #15-3

Paragraph (i)(1) in Rule 219 addresses an exemption for pharmaceutical coating exemptions. Pharmaceutical coating operations are currently allowed up to one gallon per day or twenty-two gallons per month of coatings for the tablets to meet the exemption.

The following comments are from Los Angeles County Sanitation Districts – Comment Letter #16



COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON CHAN
Chief Engineer and General Manager

August 13, 2012
File No.: 31B-380.10B

Mr. Don Hopps
Planning, Rule Development and Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Dear Mr. Hopps:

Comments on Proposed Amended Rule 219

The County Sanitation Districts of Los Angeles County (Sanitation Districts) appreciate this opportunity to comment on Proposed Amended Rule 219. The Sanitation Districts function on a regional scale and consist of 23 independent special districts serving about 5.4 million people in Los Angeles County. The service area covers approximately 815 square miles and encompasses 78 cities and unincorporated territory within the county. The Sanitation Districts protect public health and the environment through innovative and cost-effective wastewater and solid waste management, and in doing so convert waste into resources such as recycled water, energy and recycled materials.

For many years we have operated odor scrubbers to manage potential odors and ephemeral odors from sewer collection systems and wastewater treatment plants. Permits for these devices have historically contained conditions limiting the outlet concentration of hydrogen sulfide since this is the dominant odorant. In recent years however, new odor control devices have also been required to control volatile organic compounds (VOCs). These VOC control requirements have proven to be very burdensome for operating staff to execute. Because of these additional VOC control requirements, the Sanitation Districts chose to remove several voluntary control devices from service in 2008, less than a year after their startup. More recently, our operations staff decided not to replace an existing odor control scrubber at a pumping plant because of anticipated VOC control requirements that would have significantly increased maintenance demands. As a result, this pumping plant will operate without an odor scrubber since none is required.

The Southern California Alliance of Publicly Owned Treatment Works expressed similar concerns about VOC control requirements for odor scrubbers in a June 20, 2008 letter to SCAQMD (see attachment). In response, SCAQMD staff suggested that an amendment of Rule

16-1

16-2

DM # 2314058v8

219 might be an appropriate means to resolve our concern. With the amendment of Rule 219 pending, we respectfully request provisions be included to provide greater operational flexibility for odor control devices installed for sewer collection systems and wastewater treatment plants.

16-2
Cont'd

As mentioned at the Rule 219 and 222 Public Workshop held on July 19, 2012 and at a follow-up meeting on July 25, 2012, we respectfully request that Rule 219 be amended to include voluntary odor control devices. Specifically, we request the following amendments:

(d)(10) Passive carbon adsorbers ~~without using no~~ mechanical ventilation with a volume of 55 gallons or less, used exclusively for foul air odor control from at wastewater treatment plants or sanitary sewer collection systems, including such as sanitary sewers lines, manholes and pump stations.

16-3

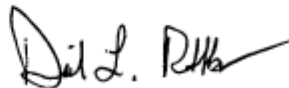
(d)(13) Active odor control devices such as activated carbon vessels, biotrickling filters and biofilters with mechanical ventilation used exclusively for odor control at wastewater treatment plants or sewer collection systems, including sanitary sewers, manholes and pump stations, provided that the VOC emissions from the equipment do not exceed three pounds per day.

16-4

Thank you for the opportunity to comment on Proposed Amended Rule 219. Please do not hesitate to contact Ed Stewart at (562) 908-4288, extension 2147, should you have any questions regarding this transmittal.

Very truly yours,

Grace Robinson Chan



David L. Rothbart
Supervising Engineer
Air Quality Engineering
Technical Services Department

DLR:WES:bb

Attachment

Response to Comment #16-1

Staff has met with Los Angeles County Sanitation District (LACSD) staff on several occasions and was briefed on the voluntary H₂S odor control systems. It was pointed out at these discussions that LACSD removed the H₂S odor control systems from service allowing for no H₂S odor control due to permitting requirements. LACSD explained that the voluntary H₂S odor control systems were installed as a courtesy for surrounding neighborhoods. AQMD permitting staff stresses that a H₂S odor control system equipped with activated carbon that is not constantly maintained can result in a spent activated carbon and potential significant release of VOC emissions. In addition, through fermentation processes with direct sunlight, any spent activated carbon H₂S control system can actually emit more emissions than if the system was never installed. Another point of

concern is that currently permitted H₂S odor control systems do not have the capacity to reduce VOC emissions in a continuous manner.

Response to Comment #16-2

The driving force behind Rule 219 is to identify equipment, processes, or operations that emit a small amount of air contaminant. A particular piece of equipment, process, or operation that cannot meet the criteria in Rule 219 would be required to be permitted. Before the H₂S odor control system can meet an exemption in Rule 219 it will have to be first source tested to verify that it meets the requirements as a small emission source.

Response to Comment #16-3

Staff agrees and has revised the rule language for Rule 219 paragraph (d)(10) as follows: “*Passive carbon adsorbers, with a maximum vessel capacity of no more than 120 gallons, without mechanical ventilation used exclusively for odor control at wastewater treatment plants or sewer collection systems, including sanitary sewers, manholes and pump stations.*”

Response to Comment #16-4

Rule development and permitting staff have discussed active H₂S odor control systems, which use mechanical means to move the airstream through the odor control system. AQMD permitting staff maintains that they cannot support an active H₂S odor control system to be exempt from permitting due to the potential VOC emissions.

The following comments are from Oxbow Carbon LLC – Comment Letter #17



OXBOW CARBON & MINERALS LLC

SENT VIA ELECTRIC MAIL: NBerry@aqmd.gov and DHopps@aqmd.gov

August 17, 2012

Mr. Naveen Berry
Planning and Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: Oxbow Carbon & Minerals LLC's Comments to Rule 219

The South Coast Air Quality Management District ("SCAQMD" or "District") is currently considering the amendment of Rule 219ⁱ (and Rule 222) to simplify and streamline the permitting process.ⁱⁱ Oxbow Carbon, LLC ("Oxbow") strongly supports SCAQMD's efforts and provides here comments on how to further strengthen Rule 219 by:

1. Clarifying that EPA-defined "trivial activities" are exempt under Rule 219; and,
2. Expanding and strengthening the exemption at Rule 219(c)(3) to cover functionally-equivalent replacements of permitted equipment where no emission increase would occur.

17-1

Both SCAQMD's proposed amendments and the additional rule changes proposed by Oxbow in these comments would make the permitting process more efficient, resulting in cost and human resources savings for both the District and industry. The proposed amendments would also allow both the District and industry to focus on compliance and other major environmental tasks. Lastly, the proposed amendments would serve to harmonize Rule 219 with EPA requirements.

Oxbow would like to discuss its comments with the District and respectfully requests an in-person meeting for this purpose.

Rule 219 Should Make Clear that EPA-Defined "Trivial Activities" are Exempt from Permitting

EPA has determined, and the SCAQMD has recognized, that certain activities are so "trivial" that their emissions impact is negligible and need not be considered when determining actual emissions or potential to emit.ⁱⁱⁱ Despite SCAQMD's recognition of the negligible impacts of EPA-defined trivial activities, Rule 219 does not explicitly list trivial activities as being exempt

17-2

1601 Forum Place • Suite 1400 • West Palm Beach, FL 33401 USA
Tel (561) 640-8800 • www.oxbow.com • Fax (561) 697-1876

from permitting. In fact, minor inconsistencies in the language of Rule 219 and EPA's trivial activities list creates confusion as to whether certain "trivial activities" are in fact exempt from permitting under Rule 219.

For example, trivial activities are defined by EPA to include:

- *Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents.*
- *Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.*

However, Rule 219(c)(6) could be read to be more limited and exclude sampling equipment from the exemption (despite the fact that sampling equipment is explicitly included under the "trivial activities" definition):

Laboratory testing and quality control testing equipment used exclusively for chemical and physical analysis, non-production bench scale research equipment, and control equipment exclusively venting such equipment.

Rule 219(c)(6) should be harmonized to be as expansive as the definition of "trivial activities" and specifically include "equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw and replace materials for analysis."

More broadly, Rule 219 should explicitly make clear that EPA-defined and SCAQMD-recognized trivial activities are exempt from permitting.

Rule 219 Should Exempt from Permitting Functionally-equivalent Replacements of Permitted Equipment If No Emissions Increase Would Occur

Rule 219(c)(3) currently provides an exemption from permitting requirements for "[i]dentical replacement in whole or in part of any equipment where a permit to operate had previously been granted for such equipment under Rule 203..." The term "identical" in this exemption should be substituted with "functionally-equivalent." Such a substitution would be in line with the intention of the rule—to make the permitting process less cumbersome and resource-intensive for both the District and a permittee that seeks to undertake a minor change to permitted equipment that is of no practical concern to either party given the negligible impacts of the modification.

The current use of "identical" in the exemption results in many inconsequential projects being subjected to the permitting project despite neither the permittee, the District nor the public having any interest in clearly inconsequential projects undergoing a formal permitting process.

17-2
Cont'd

17-3

OXBOW CARBON & MINERALS LLC

Oxbow recommends the substitution of “identical” with “functionally-equivalent” to resolve this problem.

To eliminate any concern that a Rule 219 exemption for “functionally-equivalent” replacements would result in unpermitted emission increases, the Rule 219(c)(3) exemption language could be further adjusted to state that it applies to “functionally-equivalent replacement in whole or in part of any equipment where a permit to operate had previously been granted for such equipment under Rule 203 and where no emission increase would result...” As an additional safeguard, the District might require that any entity undertaking a replacement under the “functionally-equivalent” permitting exemption make an “information-only” submittal under the SCAQMD Rule 222 filing program. Such a requirement would in fact make the Rule 219(c)(3) exemption more stringent by requiring entities undertaking replacements to notify the District, making the District aware of such replacements and providing it an opportunity to raise a red flag if it believes that an entity is misinterpreting the exemption. In turn, this would make industry more confident that it is on the same page as the District as to the proper interpretation of the exemption. The greatest benefit of the suggested changes to Rule 219(c)(3), though, would be that both the District and permittees would be spared the time and expense of undergoing resource-intensive permitting if doing so would have no practical benefit for air pollution reduction.

17-3
Cont'd

ⁱ SCAQMD Rule 219 exempts certain equipment emitting small amounts of air contaminants from SCAQMD permitting requirements. The rule has been amended on several occasions to clarify language, add exemptions, and modify emissions limits to achieve consistency with other SCAQMD rules and regulations.

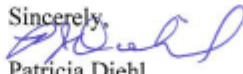
ⁱⁱ See SCAQMD Preliminary Draft Staff Report on Proposed Amended Rule 219 –Equipment Not Requiring A Written Permit Pursuant To Regulation II and Proposed Amended Rule 222 – Filing Requirements (July 2012).

ⁱⁱⁱ See SCAQMD, Draft Technical Guidance Document for the Title V Permit Program at 103 (March 2005). See also EPA “White Paper for Streamlined Development of Part 70 Permit Applications” (July 10, 1995), Appendix A.

OXBOW CARBON & MINERALS LLC

Mr. Naveen Berry
Planning and Rules Manager
August 17, 2012
Page 4 of 4

Oxbow appreciates the opportunity to submit these comments and respectfully requests an opportunity for an in-person meeting. I can be reached by telephone at (561) 640-8711 or by e-mail, Trish.Diehl@oxbow.com.

Sincerely,

Patricia Diehl
Vice President, Environmental and
Regulatory Matters

cc:

Mr. Don B. Hopps, Air Quality Specialist, SCAQMD
Weinan Chen, Ph.D., Manager, Environmental and Regulatory Matters, Oxbow

OXBOW CARBON & MINERALS LLC

Response to Comment #17-1

Staff appreciates the comment letter from Oxbow Carbon, LLC in support of the amendments to both Proposed Amended Rule 219 and Proposed Amended Rule 222.

Response to Comment #17-2

Rule 219 provides an exemption from a written permit for certain equipment, operations and processes but does not include a paragraph for “trivial activities.” However, all the exemptions are subject to review by the Executive Officer and in cases where the Executive Officer determines that a particular type of equipment, operation or process cannot operate at a low emission level, it may be determined that the equipment, operation or process requires a written permit. Therefore, staff will retain the current rule language and not include a “trivial activities” section.

Response to Comment #17-3

Staff has concerns with the rule language proposed by the commenter. This most pressing concern is how broadly could a “functional-equivalent” replacement be taken? For example, if a natural gas fired turbine driven generator is replaced with a diesel fired internal combustion engine driven generator that is “functionally-equivalent” that replacement component, although “functionally-equivalent”, would bring about concerns for permitting, not to mention toxics and other emission criteria. A “functional-equivalent” replacement could also be an individual component, such as an exhaust system with selected catalytic reduction that would be included in the written permit but may be replaced with a “functional-equivalent” exhaust system that does not have selected catalytic reduction. Staff disagrees with the commenter’s proposed language for Rule 219 paragraph (c)(3).

APPENDIX C: COMMENTS MADE DURING PUBLIC CONSULTATION MEETING NOVEMBER 8, 2012

The following comments were made at the Public Consultation Meeting held on November 8, 2010:

Comment #1

Amend Rule 219 (e)(8) to allow for the use of plasma arc cutters and lasers for maintenance and repair operations on molds that may contain stainless steel.

Response to Comment #1

Staff will work with the commenter and investigate whether clarifying language can be drafted.

Comment #2

Eliminate the word portable in 219 (b)(4) and increase the limit to 650,000 Btu/hr.

Response to Comment #2

Staff will work with the commenter to revisit the issue of portable versus non-portable power pressure washers.

Comment #3

Natural gas odorant systems should be explicitly identified in Rule 219 as being exempt from permit. There have been conflicting interpretations between different inspectors and engineers.

Response to Comment #3

We will discuss the suggestion internally. The concern is that natural gas odorant is a potential nuisance issue. Based on further review, staff will revise the proposal and add natural gas odorants to Rule 222.

Comment #4

Natural gas odorant systems should be explicitly identified in Rule 219 as being exempt from permit. There have been conflicting interpretations between different inspectors and engineers.

Response to Comment #4

We will discuss the suggestion internally. The concern is that natural gas odorant is a potential nuisance issue.

Comment #5

Crucible furnaces, subject to Rule 219 (e)(2), should have a provision to allow for the use of a health risk assessment to provide an exemption from permit. Change the provisions in Rule 219 (b)(2) to address “food ovens” and not “food convection ovens” and the VOC limit should be increased to 3 lbs/day which is contained in other rule sections.

Response to Comment #5

HRAs are impossible for an inspector to verify in the field, making enforcement of an HRA provision challenging, if not impossible. Staff will revisit the issue of the food convection ovens to see if changes are warranted.

Comment #6

The word “is” added to Rule 219 (i)(10) is confusing

Response to Comment #6

Our intent was for clarification. We will take another look at the wording.

APPENDIX C: COMMENTS MADE DURING PUBLIC CONSULTATION MEETING NOVEMBER 8, 2012

Comment #7

Move low emitting equipment, especially those impacted by Rule 1147 (such as automotive spray booths) into Rule 219.

Response to Comment #7

Staff is conducting a technology assessment on many types of equipment subject to Rule 1147. Staff does not support the exemption of automotive spray booths but there may be a possibility to amend Rule 1147 to address select sources.

Comment #8

Trivial activities as defined by US EPA should be explicitly exempt in Rule 219. Rule 219 should also exempt functionally identical replacement.

Response to Comment #8

Staff looked at the issue of trivial activities and concluded that Rule 219 appropriately addressed that universe. We will work with the commenter to identify specific activities and determine if further clarification is needed. Staff has deep reservations about including functionally identical replacement language in Rule 219 as it could create a huge loop-hole for significant revisions.

Comment #9

Support staff's proposal for gas turbines.

Response to Comment #9

Thank you for your input.

Comment #10

The language in section 219 (h) and 219 (l) for non-solvent based coatings is confusing.

Response to Comment #10

This is existing language and we are willing to work with the commenter to draft language.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD

NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from British Petroleum – Comment Letter #1

November 16, 2012

VIA EMAIL

Don Hopps

Planning, Rule Development and Area Sources

SCAQMD

21865 Copley Drive

Diamond Bar, CA 91765

Dear Mr. Hopps:

BP respectfully submits these comments regarding amendments to Rules 219 and 222, proposed by AQMD on November 2, 2012. In addition to the areas where AQMD has proposed changes, we have also suggested a couple of clarifying changes in other sections.

Proposed Amended Rule 219

1. Rule 219(b)(4) - What is the averaging period to determine if the equipment exceeds one pound of NOx per day? If the basis for applying the one pound NOx threshold is BACT, then the calendar monthly emissions should be divided by 30. Please consider revising this section to reflect the averaging period.

1-1

Proposed Amended Rule 222

1. Rule 222(b) Table 1, Boilers or Steam Generators & Process Heaters source category - Consider revising to: "Boilers or Steam Generators & Process Heaters with a rated heat input ... and produce less than one pound of NOx Emissions per day (based on a 30 calendar day average).\" If the basis for applying the one pound NOx threshold is BACT, then the calendar monthly emissions should be divided by 30.

1-2

2. Rule 222(b) Table 1, Commercial Charbroilers and Associated Air Pollution Control Equipment - It seems that a barbecue grill could meet the definition for a charbroiler. We suggest that AQMD add wording that differentiates portable vs. stationary charbroilers (e.g., Stationary Commercial Charbroilers and Associated Air Pollution Control Equipment).

1-3

3. Rule 222(d)(1)(B) - Please provide clarification on the requirement to "comply with all operating conditions imposed on the emissions source". How are operating conditions to be imposed? Is this done by AQMD when they issue the registration or approval letter? Or, does the owner/operator follow the equipment manufacturer's recommended operating conditions? This is confusing, and clarification would be helpful.

1-4

4. Rule 222(d)(1)(G) - Why is recordkeeping required for 5 years? Is this a SIP approved rule, thus enforceable under Title V?

1-5

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

If you have any questions, please contact Susan Stark, BP consultant on AQMD Issues. She may be reached at 310-847-3630 or by email at susan.stark@bp.com.

Sincerely,



Matt Rezvani

Response to Comment #1-1

Staff believes the commentor intended to comment on Proposed Amended Rule 219 paragraph (b)(3) which discusses a one pound NOx emission output limit for power pressure washers, portable hot water or steam washers and cleaners rather than fuel cells. Staff did not use an averaging methodology in the calculation of NOx emission output, staff based the NOx emission output on a daily basis.

Response to Comment #1-2

Please see Response to Comment #1-1.

Response to Comment #1-3

Staff believes that the current language is sufficient and encompasses both portable and stationary commercial charbroiling equipment.

Response to Comment #1-4

The nexus of the rule amendment will be to transition certain small emission producing equipment sources that are currently permitted into a more streamlined Rule 222 filing program. Staff proposes to do this by first exempting these certain small emissions sources in Proposed Amended Rule 219 and then transition them into Proposed Amended Rule 222 and retain the operating conditions that were on the equipment's written permit. Rule 222 is a filing program, similar to a registration, and staff will maintain all the operating conditions that were originally on the permit to operate on the filing.

Response to Comment #1-5

Yes, both Rules 219 and 222 are SIP rules and they are companion rules to the permit rule (Rule 203). The SIP rules such as the Regulation XI rules, that are applicable to sources frequently visited by AQMD inspectors, retain any required records for compliance for 3 years whereas facilities under Title V are required to retain any required records for compliance for 5 years. However, the equipment that falls into the Rules 219 and 222 may not be inspected as frequently and the records will be required to be retained for a longer period of time, that being 5 years.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from Cambro Manufacturing Company – Comment Letter #2

Rule 219 Exemption Information For Portable Plasma Cutters

Kent D. Adams, P. E.

Cambro Manufacturing Company

1) Typical Equipment Description

- Portable plasma arc cutter with hand-held torch
- Used for cutting steel, including stainless steel.
- 18 inches long, 7 inches wide, and 13 ½ inches high
- Thermal Dynamics Pakmaster 38 XL
- Serial number 01486903
- 240 volts, 29 amps



2) Process Description

The unit is moved to the location where it is needed. The equipment is plugged in to a local power outlet, and connected to compressed air. The work piece is clamped or otherwise placed in the correct position for cutting. The ground cable is attached to the work piece. The unit is turned on. The operator dons a protective mask. The operator holds the pistol grip of the torch in his hand, and brings the cutting tip close to the work. The operator depresses the torch trigger, which activates the arc and the compressed air. The arc melts the metal, and the compressed air blows the molten metal out of the kerf. The operator moves the cutting head along the surface of the work, by hand and by eye, until the desired cut has been made. The operator then turns off the equipment.

3) Operating Schedule

- Average usage per day: 6 minutes
- Maximum usage per day: 60 minutes
- Days per week: 6
- Weeks per year: 52

4) Process Rate

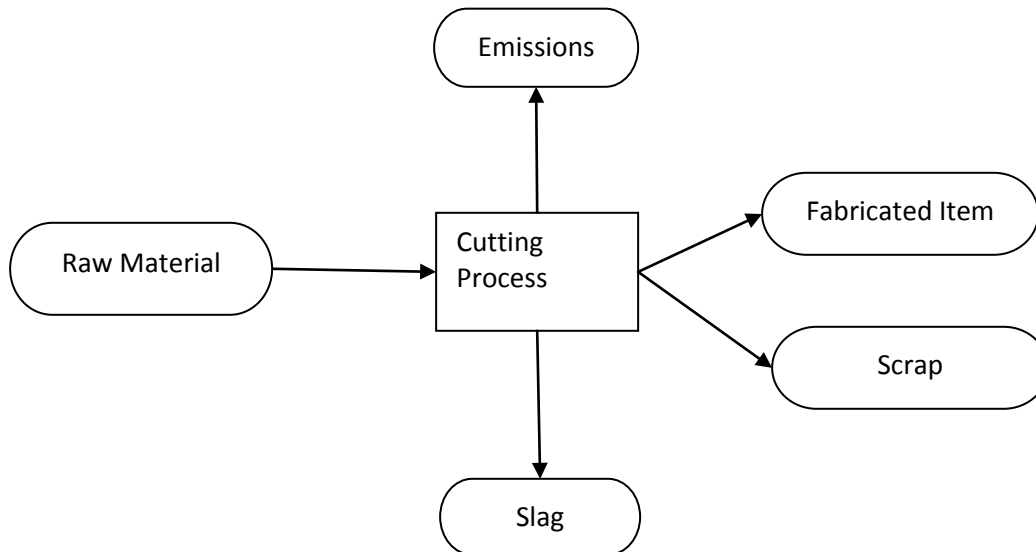
APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

The cutting rate is approximately 39 inches per minute, while cutting 16 gauge stainless steel (0.0625 inch thick).

5) Fuels and Burners Used

No fuels or burners are used in this equipment. The equipment is electric.

6) Flow Diagram



7) Exhaust System

There is no exhaust system or stack on this equipment.

8) Emissions Data

Ebadian reported a respirable mass generation rate of 395 mg/min when cutting a stainless steel plate of 1.2 mm thickness at a cutting rate of 1.39 meters per minute. The respirable mass was defined as the mass of the airborne particles of aerodynamic diameter < 10 µm. (Ebadian, et al, Size Distribution and Rate of Production of Airborne Particulate Matter Generated During Metal Cutting. Miami, Florida: Hemispheric Center for Environmental Technology, 2001).

We will assume that any metal not emitted as fume will end up on the floor as slag or will stay with the scrap. The alloy is 304 stainless steel, which is 18% chromium and 8 % nickel. Therefore, we will assume chromium emissions are 18% of total PM-10 fume emissions, and nickel emissions are 8% of total PM-10 emissions.

Bromssen reported an emission rate of 6.3 g/min for oxides of nitrogen when cutting a stainless steel plate of 8 mm thickness with a torch rated at 200 amperes. The emission factor is for dry cutting using air as the plasma gas. (Bromssen, et al, Emission of Fume, Nitrogen Oxides, and Noise in Plasma Cutting of Stainless and Mild Steel. Goteborg, Sweden: Swedish Institute of Production Engineering Research, 1994).

Emission Rates:

Because Cambro's plasma arc cutting is done at a slower speed than in the Ebadian study, it is appropriate to reduce the emission rate by a corresponding amount. The maximum cutting speed in our process is 39 inches (1 meter) per minute. Therefore the fume emission rate for our process would be:

$$395 \text{ mg PM}_{10} / 1.39 \text{ meters} = 284 \text{ mg / meter, metal fume.}$$

Our maximum cutting rate is 1 meter per minute, therefore the maximum fume emission rate is 284 mg per minute.

Chromium Fume:

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD

NOVEMBER 8 TO NOVEMBER 16, 2012

The emission of chromium would be:
 $(284 \text{ mg PM}_{10}) (0.18) = 51 \text{ mg Cr per minute.}$

Nickel Fume

The emission of nickel would be:
 $(284 \text{ mg PM}_{10}) (0.08) = 22.7 \text{ mg Ni per minute.}$

Oxides of Nitrogen

A torch rated at 200 amperes was used in the Bromssen study, and it produced emissions of 6.3 grams of NO per minute. Our torch is rated at 29 amperes. Therefore it would be appropriate to adjust the emission rate by a corresponding amount.

$(6.3 \text{ grams NO}) (29 / 200) = 0.91 \text{ grams NO per minute.}$

Emissions per day

The average usage for this equipment is approximately 6 minutes per day. Based on this usage, the average emissions will be estimated as follows:

- Chromium Fume: $(0.051 \text{ g / min}) (6 \text{ min / d}) (\text{lb} / 454 \text{ g}) = 0.00067 \text{ lb per day}$
- Nickel Fume: $(0.0227 \text{ g / min}) (6 \text{ min / d}) (\text{lb} / 454 \text{ g}) = 0.0003 \text{ lb per day}$
- Oxides of Nitrogen: $(0.91 \text{ g / min}) (6 \text{ min / d}) (\text{lb} / 454 \text{ g}) = 0.012 \text{ lb per day}$

9) Air Quality Impact

The air quality impact of this equipment is expected to be very low, for the following reasons:

- This is a very small, portable, hand-held unit, of a type that can be purchased in a hardware store or from a tool catalog.
- This unit is used only for repairs and maintenance in the Mold Shop and in the Maintenance Department.
- This unit is only used for a few minutes per day. The rest of the time, it is in storage at the Tool Room.
- This unit is not used for production purposes. The stainless steel parts that are part of Cambro's products are purchased from outsource suppliers and are not made at Cambro. Therefore there would be no need to cut any production parts.
- The emissions from this unit are very small and therefore should be considered to be *de minimus* emissions. On a daily basis, the emissions are so low that a permit should not be required.
- In many situations, the amount of time that these units are used for cutting stainless steel is a very low percentage of the total usage time.

10) Economic Impact

- These small, portable, plasma cutting units are commonly used at auto body shops, welding shops, maintenance departments, and by hobbyists in home garages. Typically, these hand held units are used sparingly, and in conjunction with arc welding operations. These units are normally used to save time in cutting operations prior to welding. They also can be used in areas where other cutting methods are more difficult, resulting in higher quality work.
- These small, portable, hand-held units typically cost anywhere from \$800.00 to \$1800.00. However, the cost of these units is dwarfed by the cost of the SCAQMD permit fees of more than \$3600.00 per unit. We believe that to have permit fees that exceed the price of the unit being regulated is a financial hardship on a business.
- The anticipated financial hardship of requiring a permit on these small units may dissuade businesses from purchasing these small plasma cutters, and may force them to use a cutting method that is more time consuming and labor intensive. This could affect the profit margin of a company, especially a small business.
- This financial hardship may cause a downturn of sales of small plasma cutters, which may, in turn, be bad for the economy in general.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012

11) Recommendation

We recommend that any plasma cutter with all of the following characteristics be exempt from the permit requirement:

- Portable unit
- Hand held torch
- Manufacturer's rating of 50 amperes or less.
- Used for repairs and maintenance purposes only, not for production uses.
- Usage limited to 60 minutes or less per day

2-1

Response to Comment #2-1

Staff's biggest concern with plasma-arc cutting stainless steel materials is the toxics that are formed during the operation. For this reason, Staff crafted the exemption for plasma-arc cutters but did not provide the exemption for plasma-arc cutters that are rated more than 400 watts. Staff appreciates your recommendations for plasma-arc cutters and believes that the proposed rule language will be sufficient for the equipment having portability capacity and equipped with hand held torches. For this amendment, staff does not believe usage requirements such as non-production uses or repair and maintenance purposes only should be incorporated into the rule language. Staff does have concerns with an amperage rating of 50 or less since 120 volts times 50 amperes is equal to 6,000 watts, well above the 400 watts in the proposed rule language.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from ERM – Comment Letter #3

From: Paul Tranquill [Paul.Tranquill@erm.com]
Sent: Monday, November 05, 2012 9:44 AM
To: Don B Hopps
Subject: Proposed Amended Rule 219

Importance: High

I have reviewed the latest proposal for Rule 219. The machining exemption (g) does not correspond to the staff report issued for this rule. The staff report has the following:

Machining equipment and granulating {219(g)(1)}

Staff is proposing to clarify the rule language regarding machining operations in Rule 219 paragraph (g)(1) by including granulating operations. Granulators are used in the plastics industry and are used to granulate plastic products during plastic recycling operations. Granulators have been observed by staff field personnel who report that granulating operations are not a significant source of particulate emissions.

The current rule language is as follows: “Equipment used exclusively for buffing (except tire buffers), polishing, carving, mechanical cutting, drilling, machining, pressing, routing, sanding, stamping, surface grinding or turning provided that any lubricants, coolants, or cutting oils used have 50 grams or less of VOC per liter of material or a VOC composite partial pressure of 20 mm Hg or less at 20 °C (68 °F) and control equipment exclusively venting such equipment. This exemption does not include asphalt pavement grinders.” Staff proposes to add additional language as follows: “Equipment used exclusively for buffing (except tire buffers), polishing, carving, mechanical cutting, drilling, granulating, machining, pressing, routing, sanding, stamping, surface grinding or turning provided that any lubricants, coolants, or cutting oils used have 50 grams or less of VOC per liter of material or a VOC composite partial pressure of 20 mm Hg or less at 20 °C (68 °F) and control equipment exclusively venting such equipment. This exemption does not include asphalt pavement grinders.” Staff does not anticipate any additional cumulative emissions with this revision.

3-1

The most recent proposed rule does not include the word “granulating.” Is this than oversight or did staff determine that the granulating should not be added. If staff determined that granulating should not be included then the staff report is requires revision.

Paul Tranquill
ERM
1351 South Grove Avenue, Suite 110
Ontario, CA 91761
T: +1 909 947 3500 extension 203
C: +1 909 614 3103
F: 1 909 947 3499

**APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012**

Response to Comment #3-1

Staff appreciates the commentor's input and has taken action to correct the staff report. The granulators were removed from the proposed rule language that was included in the public workshop version of the preliminary draft staff report due to engineering staff concerns with potential particulate emissions. The paragraph regarding granulating should not have been in the public consultation meeting version of the draft staff report.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from Hydro Tek Systems – Comment Letter #4

From: Alan Greer x222 [agreer@hydrotek.us]
Sent: Tuesday, November 13, 2012 11:30 AM
To: Don B Hopps
Subject: Comments on PAR219/222

Good morning Mr. Hopps,

I attended the meeting last week with Dr. Marlo Dean and was pleased with the listing definition for the pressure washer category. Dr. Dean felt that the BTU level should be raised to 650,000 to benefit the industry. I understand CETA's position but also have to speak on behalf of Hydro Tek Systems and we are capable of working with the 500,000 btu requirement. Also, are prepared to install dual hour meters on all systems for monitoring once implemented. I would like the verbage to change to power washers without definition of portable or stationary as to eliminate confusion with inspections and types of equipment. A Hot Power Washer is exactly that whether it is portable or stationary. It is still a Hot Power Washer. Other than that change we at Hydro Tek Systems are pleased with the definition and would like to thank you all for your hard work and efforts to help our industry comply. As always if you have any questions fell free to contact me.

4-1

Best regards,

Alan Greer

Alan Greer, Sr. Product Development Engineer

HYDRO TEK SYSTEMS INC.

2353 Almond Ave.

Redlands, CA 92374

(800) 274-9376 | (909) 799-9222 | ext: 222

agreer@hydrotek.us | www.hydrotek.us

Brilliant Design, Tough on Grime

Response to Comment #4-1

Staff appreciates the comment and has been working with industry in regard to increasing the heat input rate capacity of the portable pressure washers. Staff has learned that a small increase, from 500,000 Btu/hour to 550,000 Btu/hr, will allow several pressure washers to be included into the Rule 222 filing program while still maintaining the 50 gallon per day limit for diesel fuel use. Staff has also evaluated the need for the wording in the proposed language and has decided to remove the word “portable.” Staff acknowledges that a stationary pressure washer must be permanently mounted along with the natural gas line due to city and county code requirements to satisfy safety concerns for seismic activity. Therefore, the new revising rule language for proposed amend rule 219 paragraph (b)(4) will be as follows:

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012

- (4) ~~Portable power~~ Power pressure washers and hot water or steam washers and cleaners, that are equipped with a heater or burner that is ~~fueled either by natural gas, methanol, liquefied petroleum gas, or any combination thereof or~~ designed to be fired on diesel fuel, has a rated maximum heat input capacity of 500,000 Btu per hour or less, is equipped with non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day and ~~than~~ uses no more than 50 gallons of fuel ~~is used~~ per day. This exemption does not apply to piston-type internal combustion engines or turbines.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from Karcherna – Comment Letter #5

From: Marlo.Dean@karcherna.com
Sent: Monday, November 19, 2012 8:23 AM
To: Laki Tisopulos
Cc: James Koizumi; Don B Hopps
Subject: Pressure Washer

Laki,

When rule 1146.2 was amended, the definition of a water heater was changed. Since that change, Rule 1146.2 can now be interpreted to mean that natural gas fired pressure washers are subject to 1146.2 emission limits. However, Rule 1146.2 was never intended to regulate these natural gas fired devices according to the AQMD staff that developed the rule. We are requesting the AQMD put into writing (a rule interpretation) that pressure washers were never intended to be regulated by 1146.2 and therefore do not have to certify their equipment under that rule and that are not subject to a district permit (according to current rule 219 language).

5-1

You need this to be done regardless of what size of units are included in 222 registration. I request that the AQMD put in writing that natural gas fired pressure washers are not subject to 1146.2 (would include units that can be fired on either natural gas or lpg/propane, the above request should address that also). This will address all gas fired pressure washers up to 2 mmBtu/hr.

5-2

I enjoyed the opportunity to meet you November 8th, 2012 at the scoping meeting. It is a good feeling to know we are making progress in developing rules which address the pressure washer industry and we no longer fall under boiler regulation. You may be interested to know that recently the National Boiler Association finally recognized that pressure washers are not boilers and on October 1-5, 2012 at the National Board Center in Columbus, OH declared pressure washers are exempt from any boiler standard under ASME Section I.

5-3

If you have any questions please give me a call.

Dr. Marlo Dean
Board of Director
CETA
4275 NW Pacific Rim Blvd.
Camas, WA 98607
Ph. 877-283-2412 ext. 2701
Fax 360-833-9200

Response to Comment #5-1

Staff disagrees with the commentor's assessment regarding natural gas fired pressure washers are subject to Rule 1146.2 emission limits. The primary intent for the small emission source power pressure washers was to

**APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012**

streamline the currently permitted power pressure washers into the Rule 222 filing program by first providing an exemption for the power pressure washers that qualify and then adding them to the Rule 222 filing program.

Response to Comment #5-2

Please see response to comment #5-1

Response to Comment #5-3

Staff appreciates the commentor's input.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from MWD – Comment Letter #6

From: Kaufman,Carol Y [cykaufman@mwdh2o.com]
Sent: Friday, November 16, 2012 3:22 PM
To: Don B Hopps
Cc: Naveen Berry; Koch,Bart; jbell mwdh2o.com; Guillory,Dan
Subject: MWD Comments to Proposed Amended Rules 219 and 222
Attachments: G14049 IM Asphalt Spreader Truck.pdf

Importance: High

Dear Mr. Hopps,

This e-mail is a written follow-up to Metropolitan's oral comments provided at the November 8th Public Consultation Meeting for Proposed Amended Rules (PAR) 219 and 222. We are asking that the proposed amendments to incorporate asphalt day tankers in the rules be expanded to include existing units equipped with burner(s) designed to fire on diesel.

6-1

Metropolitan currently has an asphalt tanker truck (attached SCAQMD Permit No. G14049, A/N 507335) that is used to maintain roadways and parking lots at our desert facilities, located within both the Mojave Desert Air Quality Management District, and the SCAQMD. The truck is used only during the summer months on an as needed basis to repair existing asphalt surfaces. As you can see from the attached permit, the truck's operation is restricted to no more than eight hours per day and 216 hours per year; additionally, based on the need for road maintenance, the truck may not even be used every year in one or both of the air districts. The truck has a capacity of 2,000 gallons, and is equipped with a 15 gallon capacity diesel burner.

6-2

Metropolitan's asphalt tanker truck fits the description provided in PAR 219 (m)(23), except for the requirement that the burner be designed to fire exclusively on liquefied petroleum gases. According to the October 17, 2012 Notice of Preparation of a Draft Environmental Assessment, the SCAQMD database shows 72 permitted asphalt day tankers, of which only one is fired with diesel fuel (presumably Metropolitan's). Therefore, given the extremely low use of our existing unit and its apparent status as the only one of its type permitted with the SCAQMD, we request that PAR 219 be amended to include existing asphalt tanker trucks equipped with diesel burner(s) and allow them to be transitioned into the Rule 222 filing program. Because of the unit's extremely limited and infrequent use in the SCAQMD jurisdiction, its inclusion should not negatively affect any emission changes.

6-3

The amended PAR 219 language would be as follows:

“Equipment, including asphalt day tankers, used exclusively for the storage, holding, melting, and transfer of asphalt or coal tar pitch, that is mounted on a motor vehicle, with a maximum holding capacity of less than 600 liters (159 gallons) or equipment, including asphalt day tankers, with a maximum holding capacity of 600 liters (159 gallons) or more but less than 18,925 liters (5,000 gallons) and equipped with burner(s) designed to fire exclusively on liquefied petroleum gases only.”

6-4

Thank you for your consideration of our comments. Please contact me if you have any questions or require further information.

**APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012**

Sincerely,

Carol Kaufman
Air Quality Program Manager
Metropolitan Water District of Southern California
700 North Alameda Street
Los Angeles, CA 90012
213-217-6207
FAX 213-217-6700
Cell 310-850-6105

Response to Comment #6-1

Staff appreciates the comment and recalls the comment made during the November 8, 2012 Public Consultation Meeting as well as the comment that was submitted during the commenting period held for the July 19 2012 Public Workshop in regard to diesel fired asphalt day tankers and the proposed rule language for both proposed amended rule 219 and 222 (please see response to comment #6-2).

Response to Comment #6-2

Staff understands that the Metropolitan Water District uses their asphalt day tanker during the summer months on an as needed basis and may not even be used every year. However, including the diesel fired asphalt day tankers into the Rule 222 filing program would increase the foregone emissions to the rule making effort. In fact, the NOx emission output from diesel fuel is 20.0 pounds per thousand gallons whereas the emission output from LPG, propane and butane is 12.8 pounds per thousand gallons; diesel fuel produces 56% more NOx than LPG, propane or butane.

Response to Comment #6-3

Please see Response to Comment #6-3

Response to Comment #6-4

Staff believes the current proposed rule language regarding the asphalt day tankers is sufficient and will retain the current requirements as shown in proposed amended rules 219 and 222.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from Radtech International – Comment Letter #7

November 16, 2012

Mr. Robert Pease
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765

Re: Public comments to Proposed Amended Rule 219

Dear Robert:

RadTech International is pleased to comment on the proposed amendments to Rule 219. RadTech supports the district's efforts to improve air quality in the Basin without sacrificing a healthy business climate and believes that the implementation of UV/EB technology can accomplish both goals.

7-1

We support staff efforts to provide incentives to companies who reduce their emissions and believe the Rule 219 amendments present an opportunity to that goal. We appreciate your attention to these issues and look forward to a productive rulemaking effort. As mentioned during the public workshop, we urge the district to focus on actual emission reductions rather than on the "type" of formulation. Currently, the rule has different requirements for "non-solvent" UV/EB but, there is no definition of "non-solvent". I mentioned the example of acetone potentially being used in formulations as a "solvent" but, for district purposes, acetone is exempt. The current language under sections l(6) and (h)(1) should be clarified and the distinction between different types of UV/EB formulations should be removed.

7-2

Additionally, we would suggest adding language for UV/EB processes to mirror the current proposed language under section (h)(7) which, is currently limited to "air pollution control equipment". UV/EB is a pollution prevention technology that can achieve emissions equivalent to those achieved by control devices and, provides the added benefit of no greenhouse gas emissions due to the fact that it is not a combustion type process. Thus, the technology is meritorious of the same benefit extended to add-on control devices.

7-3

We appreciate your consideration and look forward to providing any additional information you may need.

Sincerely,

Rita M. Loof
Director, Environmental Affairs

**APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012**

Response to Comment #7-1

Thank you for supporting the proposed amendments to Rule 219 and 222 and for your comment letter.

Response to Comment #7-2

The primary intent of this project was to provide certain small emitting sources that currently have AQMD written permits with an exemption in Rule 219 that would then transition the equipment to Rule 222 in efforts to streamline these certain small emitting sources. The actual emission reductions for coatings can be seen in Regulation IX rules such as Rules 1107, 1113, 1130, 1136 and 1145. Staff believes the current rule language is sufficient and will retain both “UV or electron beam” in the text.

Response to Comment #7-3

Please see Response to Comment #7-2.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from Sempra Utilities – Comment Letter #8

November 16, 2012

Don Hopps
Air Quality Specialist Planning and Rules
SCAQMD 21865 Copley Drive
Diamond Bar, CA 91765

Subject: SCAQMD Rule 219 Proposed Rule Amendments

Mr. Hopps:

Southern California Gas Company (SCG) respectfully requests that SCAQMD reconsider their decision to not include language in Rule 219 that makes it explicitly clear that small natural gas odorant tanks do not need to be permitted.

At the request of SCAQMD, SCG had previously submitted comments with respect to Rule 219 (m)(9), providing language and supporting information to clarify that the units do not trigger the need for permits. (A copy of this submittal is attached hereto for reference.) SCAQMD's response in the staff report, however, was an unexpected departure from previous discussions with staff on the purpose of our comments. For example, in earlier discussions, Senior Manager Brian Yeh and permit staff indicated that they understood why these units should be permit-exempt, and that they only needed supporting information. In addition, SCAQMD Compliance personnel visited several natural gas producer sites with small odorant tanks, to better understand how these units operate and to determine if there were significant emissions.

The stated purpose of Rule 219, as SCAQMD knows, is to manage the administrative burdens and economic costs of permitting, by identifying and exempting from permitting "... *certain equipment that emit small amounts of air contaminants*..." SCG's odorant tanks certainly meet the public policy behind Rule 219, since they are small and are closed systems that do not emit air contaminants. Indeed these units are significantly smaller than the 250 gallon threshold listed in 219 (m)(9) – some even as small as 10 gallons. Moreover, odorant is meant to be detected immediately for safety purposes. Consequently, if there was leak it would immediately be detected by smell.

8-1

The fact that there have been no documented nuisance complaints based on odors from these units further bolster the fact that these units do not emit air contaminants sufficient to justify the need for permitting. The time and energy to permit these small odorant tanks, some as small as 10 gallons run contrary to the basic premise behind Rule 219. There is no measurable environmental compliance benefit to requiring a permit for these units. Requiring permitting for any unit should be based on emissions calculations, therefore SCG is requesting:

SCAQMD provide emission calculations for the odorant tanks to demonstrate that it exceeds emission levels that warrant permitting.

Most troubling is response 5-2 in Appendix A, in which SCAQMD states that natural gas odorant tanks need to be permitted "... *primarily due to the concerns for potential odor complaints issues*..." SCG believes that these comments are misplaced, are inaccurate, and are not based on any factual occurrences. To date SCG has not received or been made aware of any instance or circumstance where a natural gas odorant tank was determined to be the source of an odor complaint or public nuisance. SCG is concerned that this response mischaracterizes these odorant tanks as chronic or high probability nuisance sources. If SCG is incorrect, then it respectfully requests:

SCAQMD to produce documentation of any and all such nuisance complaints traceable to a SCG-owned odorant tanks.

8-2

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

More critically, from a legal standpoint, neither Rule 219 nor any other of SCAQMD's rules, state that "nuisance potential" constitutes a sufficient basis for permitting. If SCAQMD is concerned about the lack of any recourse if a nuisance complaint is ever filed and odorant tanks remain exempt from Rule 219, then it should revisit its Rule 402. Rule 402 prohibits the discharge "from any source whatsoever" of air contaminants sufficient to cause a nuisance to the public. Therefore, a piece of equipment – permitted or not – if the cause of a public nuisance, SCAQMD can always issue a NOV alleging a violation of Rule 402.

If this change to Rule 219 reflects a change in SCAQMD policy regarding nuisance as a basis for permitting, then SCAQMD should take this opportunity to include many other pieces of equipment that have nuisance potential. Some of these pieces of equipment have a long history of creating odor complaints and in some cases public nuisances. These pieces of equipment include but are not limited to:

1. Public sewer manholes
2. Product recovery tanks for subsurface contamination
3. Clothes dryers less than 2 million BTU
4. Tenter Frames less than 2 million BTU
5. Metal melting furnaces and equipment at foundries
6. Coffee roasting equipment
7. Buffers
8. Baghouses and cyclones venting wood working facilities.

Additionally, SCG finds it interesting that SCAQMD chose to provide several additional exemptions to asphalt day tanks and increase the amounts for exemption to 1000 gallons in one instance and 5000 gallons in another. Asphalt day tankers have one of the highest if not the highest instance for creating odor complaints in SCAQMD.

8-3

Therefore SCG is asking that SCAQMD provide examples where nuisance potential was used for a facility or facilities that has not received odor complaints or public nuisances.

Unlike other operations or companies that use various pieces of equipment to generate revenues, natural gas odorant tanks are required by the Department of Transportation (DOT). The purpose of having odorant is to comply with DOT requirements for odorizing natural gas for safety reasons. As a CPUC regulated utility, SCG is required to accept all natural gas that meets our natural gas specifications. That means each producer in California that produces natural gas must have an odorant facility in order to inject sufficient odorant in its gas to meet DOT regulations.

Finally, SCAQMD has conveniently forgotten what it advised SCG several years ago. In 2008, SCG wrote a letter and asked SCAQMD if it agreed with SCG's assessment that small natural gas odorant tanks do not require a permit from the SCAQMD. At that time, SCG had 17 odorant tanks with SCAQMD permits to operate. SCAQMD, at that time, determined that permits were not required, and the 17 permits were subsequently inactivated. The circumstances and rules that existed in 2008 are the same today. Nuisance potential was not an issue at that time and nothing has changed since then to justify making nuisance potential an issue today. As a result of this "flip flop", the SCAQMD is trying to force SCG to reapply for permits that SCAQMD had inactivated in 2008. Based on the current permitting fees, each permit will now cost \$3440.06 for a total of \$58,481.02.

In conclusion, SCG urges SCAQMD to reconsider and provide a clear and concise exemption for natural gas odorant tanks and the equipment associated with them.

8-4

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

Thank you



Zach Muepo

July 17, 2008

South Coast Air Quality Management District

Mr. Edwin Pupka
Senior Enforcement Manager Refinery/Energy
Mr. Mike Mills
Senior Engineering Manager Area Sources

21865 E. Copley Drive
Diamond Bar, CA 91765-4182

Subject: Deactivation of Odorizer Permits Exempt Under Rule 219(m)(9)

Dear Sirs:

As a California Public Utility Commission (CPUC) regulated natural gas transmission utility, Southern California Gas (SCG) must accept CPUC quality commercial natural gas from local "producers" which is a CPUC mandate. Producers are small to medium sized crude oil producing fields which produce CPUC quality commercial natural gas as a byproduct of their primary operations. This producer gas must be odorized to conform to CPUC safety standards and regulations. SCG has installed and operates several odorizing systems at 17 producer sites throughout the SCAQMD jurisdiction. Each one of the odorizing systems has an odorant tank of less than 251 gallons.

After careful review of the permits to operate for the odorizing systems at the producer sites, we have determined that the systems are exempt under Rule 219 m(9) which states the following:

"Equipment used exclusively for VOC containing liquid storage or transfer to and from such storage, of less than 950 liters (251 gallons) capacity. . ."

Pursuant to this section of the rule we have completed and attached the necessary forms to this letter to ask for the permits to operate for the odorizing systems to become inactive. Please return all prorated fees associated with this inactivation. If you have any question please feel free to contact me.

Regards



Zach Muepo

Response to Comment #8-1

Rule Development staff has meet with staff engineers in regard to the small natural gas odorant tanks in regard to providing an exemption in proposed amended rule 219 to exempt such equipment that meets the requirements stated in the proposed rule language. Staff has determined that certain odorant tanks could be exempted by proposed amended rule 219 and then filing in the Rule 222 filing program. Staff agrees that these small odorant tanks do fit into the category for certain equipment that emit small amounts of air contaminates and has provided for the small odorant tanks in proposed amended rule 222.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

Response to Comment #8-2

Staff's concern for potential odor complaints from equipment that includes odorant storage is a valid concern should the equipment release the 50/50 mix of XX & YY from the tank. However, staff agrees with the commentor that if the product does not vent to atmosphere, there would not be a potential odor nuisance issue. As of this date, MM/DD/YY, AQMD has not received a nuisance odor complaint that was positively verified by AQMD compliance staff from any Southern California Gas Company installation.

Response to Comment #8-3

The AQMD does indeed have a rule under Regulation IV for nuisance, Rule 402-NUISANCE. The rule language is as follows:

"A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property."

"The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."

Under Rule 402 and the California Health and Safety Code Section 42301, nuisance potential has always been a basis for permitting.

Field compliance staff investigate reported nuisance reports regarding odor issues and if they collect 8 – 10 affidavits from individuals who wish to allege a nuisance complaint and staff can positively identify the source of the odors causing the nuisance, a Notice of Violation can be written to that source that caused the odor nuisance. This policy has been in place since the May 7, 1976 adoption of Rule 402.

Staff expanded the exemption for both tar pots and asphalt day tankers so that several of these units, that are currently permitted, could be transitioned into the Rule 222 filing program while still maintaining the permit operation conditions. Both tar pots and asphalt day tankers are subject to Rule 402 – NUISANCE.

Response to Comment #8-4

Staff has crafted additional rule language to include storage of odorant, transfer and control equipment for paragraph (m)(9) in proposed amended rule 219 as follows:

**APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD
NOVEMBER 8 TO NOVEMBER 16, 2012**

- (9) Equipment used exclusively for VOC containing liquid storage or transfer to and from such storage, of less than 950 liters (251 gallons) capacity and equipment used exclusively for the storage of odorants for natural gas, propane, or oil with a holding capacity of less than 950 liters (251 gallons) capacity and associated transfer and control equipment used exclusively for such equipment. This exemption does not include asphalt.

In addition, staff also crafted additional rule language in proposed amended rule 222 as follows:

Storage of odorants for natural gas, propane, or oil with a holding capacity of less than 950 liters (251 gallons) and associated transfer and control equipment.

Staff believes that the small odorant storage, transfer and control equipment will be a viable small emitting source candidate for the Rule 222 filing program.

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

The following comments are from Yorke Engineering – Comment Letter #9

October 29, 2012

Don Hopps
SCAQMD PRDAS
21865 Copley Dr, 2nd Floor
Diamond Bar, CA 91765
909-396-2334
dhopps@aqmd.gov

**Subject: Permit Exemptions for Aluminum Melting Pots with Trace Amounts of Beryllium
Consolidated Precision Products – Pomona (ID 126536)**

Dear Mr. Hopps:

We are submitting a request to include aluminum melting pots with trace amounts of beryllium to Rule 219. We understand that comments are being solicited per the Notice of Public Consultation Meeting and CEQA Scoping Meeting for Proposed Amended Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II and, Proposed Amended 222 - Filing Requirements for Specific Emission Sources Not Requiring A Written Permit Pursuant to Regulation II. Yorke Engineering, LLC (Yorke) previously submitted this document to you and to Rick Hawrylew on September 18, 2012; Rick is the permit engineer for Consolidated Precision Products (CPP) in Pomona. We reviewed the notice and do not see that this category equipment is being considered for Rule 219.

Yorke is assisting Consolidated Precision Products (CPP) in Pomona in achieving compliance with the requirements of SCAQMD Rule 1147. We prepared the Rule 1147 Alternate Compliance Plan which documents the schedule by which this facility expects to meet the NOx emission limits for each piece of permitted equipment. Since the cost of retrofitting or replacing the equipment is significant, CPP is investigating ways to reduce the costs of compliance while still meeting the regulatory requirements. In some cases, the cost of retrofit burners exceeds the value of the equipment.

One avenue that we want to explore is to operate some aluminum melting pots that are currently permitted under Rule 219 permit exemptions. If the equipment is exempt from permitting, CPP can surrender the permits to operate and the equipment would no longer be subject to Rule 1147. Since these devices are very small combustion sources, they do not contribute significant NOx emissions whether they are permitted or not.

We conducted an analysis of the SCAQMD-permitted aluminum melting pots operating at CPP - Pomona to determine whether they qualify for permit exemptions. We identified three criteria which must be met in order to qualify for a permit exemption under Rule 219:

- 1) Heat input rating must be <2,000,000 Btu/hour;
- 2) Health risk due to emissions of beryllium must be below Rule 1401 thresholds; and
- 3) The equipment must not be subject to a federal NESHAP.

We ask for your concurrence that the permit exemptions described in this letter are applicable and seek consent to surrender the permits for these melting pots and remove them from Rule 1147 applicability.

9-1

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

BACKGROUND

CPP Pomona has several SCAQMD-permitted aluminum melting pots, each with a capacity of less than 992 lbs, which process aluminum alloys that contain trace amounts of beryllium (<0.07% by weight). If the total heat input rating of these melting pots is less than or equal to 2 mmBtu/hour they may be exempt from permitting under Rule 219 (e)(2) if a health risk assessment can demonstrate that the units will not require a permit due to significant health risk impacts; 219(s)(2) excepts equipment that has significant health risk impacts but would otherwise qualify for a permit exemption. By eliminating these permits, these units would not be subject to the NOx limits of Rule 1147. CPP Pomona is a Title V facility. Table 1 shows the current list of permitted melting pots.

Table 1: Permitted Aluminum Melting Pots

Equipment Description	A/N	Permit #	# of Burners	Permitted Heat Input Rating (Btu/hr)	Actual Measured Maximum Heat Input Rate (Btu/hr)	Weight Capacity
Aluminum Holding Furnace 8-F, 300#	379807	F38944	1	1,000,000	356,581	300 lb
Aluminum Holding Furnace 5-F, 300#	379817	F38958	1	1,000,000	357,287	300 lb
Aluminum Melting Furnace 3-F, 600#	379833	F38928	1	1,000,000	691,928	600 lb
Aluminum Melting Furnace 5-E, 900#	379819	F38960	1	2,250,000	775,114	900 lb
Aluminum Melting Furnace 4-E, 900#	379818	F38959	1	2,250,000	1,009,000	900 lb
Aluminum Melting Furnace 3-E, 900#	379816	F38957	1	2,250,000	934,435	900 lb
Aluminum Melting Furnace 2-E, 900#	379822	F39029	1	2,250,000	1,129,898	900 lb
Aluminum Melting Furnace 2-F, 900#	379824	F39030	1	2,250,000	1,351,253	900 lb

9-2

Rule 219 Permit Exemptions

The permit exemption in 219(e)(2) is for melting pots with a capacity of less than 992 lbs in which aluminum alloys are melted that contain over 50% aluminum provided the alloy does "not contain alloying elements of arsenic, beryllium, cadmium, chromium and/or lead and such furnaces are exempt pursuant to paragraph (b)(2)" (i.e. heat input rating is <2,000,000 Btu/hour).

Since the alloys used in these melting pots contain trace amounts of beryllium, it would appear that this exemption is unavailable. However, the SCAQMD has allowed a permit exemption for melting pots which process alloys that do not contain significant amounts of beryllium based on the results of a Rule 1401 health risk assessment.

HEAT INPUT RATING

Five of the melting pots have heat input ratings of 2,250,000 Btu per hour as listed on their permits; the other three are listed at 1,000,000 Btu/hour. However, CPP had all of their aluminum melting pots tested by technicians from the Southern California Gas Company who measured their actual maximum heat input rating. All are below 2,000,000 Btu/hour as indicated in Table 1. Attached to this letter is documentation of the testing to measure maximum heat input rating. All melting pots meet the exemption under 219(b)(2).

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

EMISSION CALCULATIONS

The melting, pouring and casting of aluminum alloys generates emissions of particulate matter (PM) and beryllium due to their presence in the alloys.

Emission Factors

We estimated PM emission rates using emission factors from United States Environmental Protection Agency, AP-42. The emission factors for the aluminum melting, pouring and casting processes are summarized in the Table 2.

Table 2: PM Emission Factors for the Aluminum Melting Pots

Process	PM Emission Factor (lbs/ton)	Source
Aluminum Pouring and Casting	0.04	AP-42, Section 12.11, Table 12.11-2
Aluminum Melting	1.9	AP-42, Section 12.8, Table 12.8-2
Combined	1.94	

We estimated emissions of beryllium by multiplying the PM emission rates by the weight percentage of this metal. Table 3 lists the aluminum alloys processed at this facility with trace amounts of beryllium and the weight percentage ranges.

Table 3: Aluminum Alloys with Trace Beryllium Content

Alloy	Be (%)
A357.0 Low Mag.	.04 - .07
A357.0 Med. Mag.	.04 - .07
A357.0 High Mag.	.04 - .07
D357.0	.04 - .07

9-3

For the purpose of this analysis we assumed that the maximum percentage of beryllium was 0.07%.

Emission Rates

We calculated annual and hourly emissions based on aluminum throughput rates that were determined based on the maximum individual cancer risk threshold; see the health risk assessments below. We assumed an operating scheduled of 8 hours/day, 5 days/week, 52 weeks/year. Based on the Tier 3 health risk assessment, the maximum aluminum processing throughput that would allow the aluminum melting pots to qualify for the permit exemption are listed in Table 4.

Table 4: Aluminum Alloy Process Rates (per melting pot)

(tons/year)	(lbs/month)	(tons/hour)	(lbs/hour)
443.5	73,917	0.213	426.4

The emission rates for PM and beryllium are shown in Table 5.

Table 5: Emission Rates

Pollutant	Compound Content in Aluminum Alloy (%)	Maximum Hourly (lbs/hour)	Maximum Annual (lbs/year)
Particulate Matter (PM)	-	0.413649	860.39
Beryllium	0.07%	0.000290	0.60

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

HEALTH RISK ASSESSMENT

The aluminum alloys processed in the melting pots contain beryllium, which is a toxic air contaminant (TAC). Beryllium may present a carcinogenic/chronic hazard. In order to qualify for a permit exemption, the health risk impacts from each melting pot cannot exceed the thresholds listed in the paragraph 219(s)(2) exception, which references the Rule 1401 health risk index thresholds:

- 1) Increase in Maximum Individual Cancer Risk (MICR) must be less than one in one million (1.0×10^{-6})¹;
- 2) The increase in total chronic hazard index (HIC) will not exceed 1.0 at any receptor location²;
- 3) The increase in total acute hazard index (HIA) will not exceed 1.0 at any receptor location³.

Our objective was to determine the maximum aluminum alloy process throughput rate that would result in health risk indices just below the threshold limits. Our approach was to set up the health risk analysis spreadsheet to calculate the health risk indices with annual throughput weight as an input. The maximum hourly process rate was calculated by dividing the annual rate by the maximum hours per year. We varied the annual input quantity until we reached one of the

¹ Rule 1401(d)(1)(A)

² Rule 1401(d)(2)

³ Rule 1401(d)(3)

health risk thresholds. In this case, MICR of 1 in one million for the nearest offsite worker was the limiting health risk index.

We performed a Tier 2 health risk analysis in accordance with SCAQMD guidelines⁴. We then conducted a Tier 3 analysis and found that it yielded an even higher annual throughput limit.

Maximum Individual Cancer Risk (MICR) is calculated as follows:

$$\text{MICR} = \text{Cancer Potency (CP)} \times \text{Dose-Inhalation (DI)} \times \text{Multipathway Factor (MP)}$$

Where:

$$\text{DI} = C_{\text{air}} \times \text{DBR} \times \text{EVF} \times 10^{-6}$$

$$C_{\text{air}} = Q_{\text{tons}} \times X/Q \times \text{AF}_{\text{ann}} \times \text{MET}$$

Therefore, the equation for calculating MICR is:

$$\text{MICR} = \text{CP} \times Q_{\text{tons}} \times X/Q \times \text{AF}_{\text{ann}} \times \text{MET} \times \text{DBR} \times \text{EVF} \times 10^{-6} \times \text{MP}$$

Where:

CP	Cancer Potency (mg/kg-day) ⁻¹
DI	Dose through inhalation (mg/kg/day)
MP	Multipathway factor, if applicable (unitless)
C_{air}	Annual average 24 hour per day concentration in air ($\mu\text{g}/\text{m}^3$)
DBR	Daily breathing rate (L/kg body weight-day)
EVF	Exposure Value Factor (unitless)
Q_{tons}	Maximum emission rate (tons/year)
X/Q	Dispersion factor [$(\mu\text{g}/\text{m}^3)/(\text{ton}/\text{year})$]
AF_{ann}	Annual concentration adjustment factor (unitless)
MET	Meteorological correction factor (non-dimensional)

Chronic (HIC) and Acute (HIA) health risk indices are calculated as follows:

$$\text{Total HIC}_{\text{target organ}} = \Sigma \{ [Q_{\text{yrTAC}} \times (X/Q) \times \text{MET} \times \text{MP}] / (\text{Chronic REL}_{\text{TAC}}) \}_{\text{target organ}}$$

$$\text{Total HIA}_{\text{target organ}} = \Sigma \{ [Q_{\text{hrTAC}} \times (X/Q)_{\text{hr}}] / (\text{Acute REL}_{\text{TAC}}) \}_{\text{target organ}}$$

Where:

Σ_{TAC}	Sum of the contribution for each Toxic Air Contaminant (TAC)
HIC	Chronic hazard index (calculated for each target organ)
HIA	Acute hazard index (calculated for each target organ)
Q_{TAC}	Emission rate of each TAC

⁴ Risk Assessment Procedures for Rule 1401 and 212, Version 7.0 (7/1/2005)

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

X/Q	Annual average dispersion factor ($\mu\text{g}/\text{m}^3$)/(ton/year)
REL _{TAC}	Chronic or Acute Reference Exposure Level ($\mu\text{g}/\text{m}^3$) for each TAC
X/Q _{hr}	1-hour average dispersion factor in ($\mu\text{g}/\text{m}^3$)/(lb/hour)
MP	Multi-pathway adjustment factor
MET	Meteorological correction factor (non-dimensional)

Since the melting pots do not have dedicated exhaust stacks, we modeled their emissions as a volume source to determine the dispersion factor. The building dimension is approximately 745 ft x 298 ft. For a volume source, the receptor distance is the distance from the center of the building to the nearest receptor location. Table 6 lists the parameters used in this analysis.

Table 6: Parameters for Tier 2 Health Risk Analysis

Parameter	Value		Comment
	Residential	Worker	
Source Type	Volume		
Building Area	222,010 sq. ft.		
Building Height	30 ft.		
Operating Hours	8 hours/day, 5 days/week		
Operating Days	Maximum 260 days/year		
Distance to Receptor	165 meters	120 meters	
Dispersion Factor X/Q	1.63 ($\mu\text{g}/\text{m}^3$)/(tons/year)	2.57 ($\mu\text{g}/\text{m}^3$)/(tons/year)	Table 5A (Area >30,000 ft ² , Height >20 ft)
1-Hour Dispersion Factor X/Q _{hr}	86.95 ($\mu\text{g}/\text{m}^3$)/(lb/hour)	117.1 ($\mu\text{g}/\text{m}^3$)/(lb/hour)	Table 7 (Area >30,000 ft ² , Height >20 ft)
Q _{tons}	315.5 tons/year		
Q _{hour}	303.4 lbs/hour		
AF _{max}	1.0	4.2	Table 3C
DBR	302	149	Table 9A
EVF	0.96	0.38	Table 9B
MET	0.91		Table 4B (Pomona)

9-3

The Tier 2 health risk analysis results are summarized in Table 7.

Table 7: Tier 2 Health Risk Analysis Results

Risk Index	Resident	Worker	Rule 1401 Standard
Maximum Individual Cancer Risk (MICR)	7.76×10^{-7}	9.99×10^{-7}	1×10^{-6}
Chronic Health Index (HIC)	4.55×10^{-2}	7.15×10^{-2}	1.0
Acute Health Index (HIA)	0	0	1.0

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

We also performed a Tier 3 analysis using the EPA-approved SCREEN3 tool to calculate the dispersion factors. These dispersion factors were used to calculate health risk in a similar fashion to the Tier 2 approach. Table 8 lists the additional parameters used in the Tier 3 analysis.

Table 8: Parameters for Tier 3 Health Risk Analysis

Parameter	Value		Comment
	Residential	Worker	
Source Type	Volume, >30,000 sq.ft.		
Building Height	30 ft.		
Dispersion Factor X/Q	42.55 ($\mu\text{g}/\text{m}^3$)/(g/sec)	57.66 ($\mu\text{g}/\text{m}^3$)/(g/sec)	0.08 x 1-hour X/Q
1-Hour Dispersion Factor X/Q_{1h}	531.9 ($\mu\text{g}/\text{m}^3$)/(g/sec)	720.8 ($\mu\text{g}/\text{m}^3$)/(g/sec)	SCREEN3 output
Q_{nom}	443.5 tons/year		
Q_{hour}	426.4 lbs/hour		
MET	1.00		

The Tier 3 health risk analysis results are summarized in Table 9.

Table 9: Tier 3 Health Risk Analysis Results

Risk Index	Resident	Worker	Rule 1401 Standard
Maximum Individual Cancer Risk (MICR)	8.99×10^{-7}	9.99×10^{-7}	1×10^{-6}
Chronic Health Index (HIC)	5.72×10^{-2}	7.14×10^{-2}	1.0
Acute Health Index (HIA)	0	0	1.0

BERYLLIUM NESHP

We evaluated whether the federal National Emission Standard for Hazardous Air Pollutants (NESHP) for Beryllium (40 CFR 61 Subpart C) applies to the aluminum melting pots since sources subject to this regulation would be excepted from the permit exemption under Rule 219(s). 40 CFR 61 Subpart C applies to the following stationary sources:

- 1) Extraction plants, ceramic plants, foundries, incinerators, and propellant plants which process beryllium ore, beryllium, beryllium oxide, beryllium alloys, or beryllium-containing waste
- 2) Machine shops which process beryllium, beryllium oxides, or any alloy when such alloy contains more than 5 percent beryllium by weight.

Table 10 summarizes the definitions of beryllium ore, beryllium, beryllium oxide, beryllium alloys, or beryllium-containing waste as defined in § 61.31, and the applicability to the aluminum alloys processed by CPP.

Table 10: Material Definition and Applicability

Material	Definition Pursuant to § 61.31	Processed By CPP? (Y/N)
Beryllium Ore	Any naturally occurring material mined or gathered for its beryllium content	N
Beryllium	Element Beryllium	N
Beryllium Oxide	BeO	N
Beryllium Alloys	Any metal to which beryllium has been added in order to increase its beryllium content and which contains more than 0.1 percent beryllium by weight.	N
Beryllium-Containing Waste	Material contaminated with beryllium and/or beryllium compounds used or generated during any process or operation performed by a source subject to 40 CFR 61 Subpart C.	N

Since CPP does not process beryllium ore, beryllium, beryllium oxide, beryllium alloys, or beryllium-containing waste, 40 CFR 61 Subpart C is not applicable.

9-3

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

FINDINGS AND CONCLUSIONS

CPP intends to comply with the requirements of Rule 1147 and is following the schedule proposed in their Alternate Compliance Plan. They are seeking legitimate ways to reduce the costs for retrofitting and replacing combustion equipment. We believe the aluminum melting pots that are currently permitted can operate under Rule 219 permit exemptions, the permits can be surrendered, and these units should no longer be subject to Rule 1147.

Based on our analysis of the SCAQMD regulations and health risk analysis, our findings are as follow:

- 1) Melting pots with capacity of less than 992 lbs which process aluminum alloys that contain trace amounts of beryllium (~0.07% by weight) should qualify for permit exemption under Rule 219(e)(2) provided that exemptions under 219(b)(2) (heat input <2 mmBtu/hour) and 219(s)(2) (health risk limits) are also met.
- 2) In order to meet the exemption under Rule 219 (s)(2), each melting pot must stay under Rule 1401 health risk index thresholds, which can be met by limiting the annual throughput of beryllium-containing aluminum alloy to 443.5 tons/year for each melting pot.
- 3) CPP is not a stationary source that is subject to 40 CFR 61 Subpart C- National Emission Standard for Beryllium.

9-3

We ask for your concurrence that the Rule 219 permit exemptions described in this letter are applicable and seek your consent to surrender the permits for these aluminum melting pots and remove them from Rule 1147 applicability. We look forward to your response and would welcome the opportunity to meet with you to discuss this further. Should you have any questions please contact me at 949-248-8490 x224.

Sincerely,



Peter Moore
Principal Engineer
Yorke Engineering, LLC

Cc: Al Bannister, CPP-Pomona
Rick Hawrylew, SCAQMD
Brian Yorke, Yorke Engineering, LLC

Attachment:

1. Southern California Gas Company Tests of Heat Input Rating
2. Health Risk Assessment

Response to Comment #9-1

Staff met with the commentor to discuss the trace amounts of Beryllium in melting pots containing aluminum alloys. The main purpose for permitting the melting pots, which are furnace fired, is the particulate emissions generated by such processes. In addition, aluminum alloys that have beryllium not only produce particulate emissions but particulate emissions containing beryllium compounds. Rule development staff met with engineering staff and was advised that the current permits for the facility's melting pots are not based on heat input but rather the particulate emissions that are produced during the melting operation.

Response to Comment #9-2

The original reason for requiring permits above the size and volume limits in as currently shown in Rule 219 was not because of the heat input but rather the capacity of the alloying materials, less any toxic materials such as arsenic, beryllium, cadmium, chromium and lead. Staff reviewed the history of Rule 219 and noted that these

APPENDIX D: COMMENT LETTERS RECEIVED DURING COMMENT PERIOD NOVEMBER 8 TO NOVEMBER 16, 2012

types of furnaces and melting pots were permitted due to particulate emissions, which could also contain arsenic, beryllium, cadmium, chromium and lead particulate emissions.

Response to Comment #9-3

In response to the request for requiring permits for metal furnaces, AQMD staff has reviewed the history of Rule 219 and the information provided in your request. Based on this review and given that these furnaces have been and are required to have permits because of process particulate emissions (versus combustion emissions), staff is not proposing to exempt these units from the requirement to have an AQMD permit.

When Rule 219 was adopted in 1976, the lower limit for combustion sources requiring a permit in Rule 219 was 20 million Btu/hr. The requirement for permits for metal furnaces since that time has always been capacity – greater than 992 pounds or greater than 452 cubic inches. This capacity requirement is a separate criteria from the burner(s) size requirement. In 1988 the section on metal melting in Rule 219 was revised to clarify that furnaces exempt based on process weight or volume would still require a permit if there burner(s) were greater than 2 million Btu/hr (the revised combustion criteria since 1988).

Response to Comment #9-4

Since, the AQMD has always required these metal melting furnace be subject to permits because of particulate emissions, staff reviewed the information presented in the comment letter and has the following comments. The emission factor for particulates from these operations represents an estimate of average emissions – not maximum emissions. Based on the information provided in the comment letter, the justification used in 1976 for requiring permits for these devices (particulate emissions) is still valid.

With regard to Rule 1147 requirements, staff has found that burners are available to meet the 60 ppm emission limit for this equipment in the rule. However, this is one of many categories of equipment which staff is currently evaluating as part of the Technology Assessment for Rule 1147. If the Rule 1147 Technology Assessment finds that the cost or cost-effectiveness is prohibitive, staff will propose to change the requirements in Rule 1147 for this equipment.

Staff has also found that most of these furnaces are eligible for the five year extension of the compliance date based on NOx emissions. There are a variety of options to document NOx emissions of one pound per day or less. Some furnaces only require a timer to prove their emissions are less than 1 pound per day while furnaces with modulating burners can use a gas meter which costs about \$400 to document gas use and the resulting NOx emissions.

ATTACHMENT H

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Environmental Assessment for:

Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II,

Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II

May 2013

SCAQMD No. 121017JK

State Clearinghouse No: 2012101060

Executive Officer

Barry R. Wallerstein, D. Env.

Deputy Executive Officer

Planning, Rule Development and Area Sources

Elaine Chang, DrPH

Assistant Deputy Executive Officer

Planning, Rule Development and Area Sources

Laki Tisopulos, Ph.D., P.E.

Planning and Rules Manager

Planning, Rule Development and Area Sources

Susan Nakamura

Author:	James Koizumi	Air Quality Specialist
Technical Assistance:	Don Hopps	Air Quality Specialist
	Wayne Barcikowski	Air Quality Specialist
Reviewed By:	Steve Smith, Ph.D.	Program Supervisor, CEQA
	Naveen Berry	Planning and Rules Manager
	Robert Pease	Program Supervisor
	Lauren Nevitt	Deputy District Counsel II
	Barbara Baird	District Counsel

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD**

CHAIRMAN: WILLIAM A. BURKE, Ed.D.
Speaker of the Assembly Appointee

VICE CHAIR: DENNIS R. YATES
Mayor, City of Chino
Cities Representative, San Bernardino County

MEMBERS:

MICHAEL D. ANTONOVICH
Supervisor, Fifth District
Los Angeles County Representative

JOHN J. BENOIT
Supervisor, Fourth District
Riverside County Representative

MICHAEL A. CACCIOTTI
Councilmember, City of South Pasadena
Cities of Los Angeles County, Eastern Region

JOSIE GONZALES
Supervisor, Fifth District
San Bernardino County Representative

BEN BENOIT
Councilmember, City of Wildomar
Cities Representative, Riverside County

JOSEPH K. LYOU, Ph.D.
Governor's Appointee

JUDITH MITCHELL
Mayor Pro Tem, Rolling Hills Estates
Cities of Los Angeles County, Western Region

SHAWN NELSON
Supervisor, Fourth District
Orange County Representative

Dr. CLARK E. PARKER, Sr.
Senate Rules Committee Appointee

JAN PERRY
Councilwoman, Ninth District
City of Los Angeles Representative

MIGUEL A. PULIDO
Mayor, City of Santa Ana
Cities Representative, Orange County

EXECUTIVE OFFICER:
BARRY R. WALLERSTEIN, D.Env.

TABLE OF CONTENTS

CHAPTER 1 – EXECUTIVE SUMMARY

Introduction.....	1-1
California Environmental Quality Act (CEQA)	1-1
Previous CEQA Documentation	1-3
Intended Uses of this Document	1-9
Areas of Controversy	1-10
Executive Summary	1-11

CHAPTER 2 - PROJECT DESCRIPTION

Project Location	2-1
Project Background.....	2-1
Project Objective.....	2-2
Project Description.....	2-7

CHAPTER 3 – EXISTING SETTING

Introduction.....	3-1
Existing Setting.....	3-1

CHAPTER 4 – ENVIRONMENTAL IMPACTS

Introduction.....	4-1
Potential Environmental Impacts and Mitigation Measures	4-1
Potential Environmental Impacts Found Not to be Significant	4-12
Significant Irreversible Environmental Changes	4-12
Potential Growth-Inducing Impacts	4-13
Consistency	4-13

CHAPTER 5 – ALTERNATIVES

Introduction.....	5-1
Alternatives Rejected as Infeasible	5-1
Description of Alternatives	5-3
Comparison of Alternatives	5-5
Lowest Toxic and Environmentally Superior Alternatives	5-6
Conclusion	5-7

APPENDICES

Appendix A – Proposed Amended Rules 219 and 222	
Appendix B – Notice of Preparation/Initial Study (Environmental Checklist)	
Appendix C – Assumptions and Calculations	

TABLE OF CONTENTS (CONCLUDED)

LIST OF TABLES

Table 1-1: Areas of Controversy.....	1-10
Table 1-2: Summary of PARs 219 and 222 and Project Alternatives	1-14
Table 1-3: Comparison of Adverse Environmental Impacts of the Alternatives	1-15
Table 3-1: NOx Baseline Emission Inventory for Rules 219 and 222 Equipment	3-7
Table 3-2: State and Federal Ambient Air Quality Standards	3-8
Table 3-3: 2011 Air Quality Data – South Coast Air Quality Management District.....	3-10
Table 3-4: 2008 GHG Emissions for Basin	3-44
Table 4-1: SCAQMD Air Quality Significance Thresholds.....	4-3
Table 4-2: PAR 219 and/or PAR 222 Provisions and Effects	4-4
Table 4-3: Daily NOx Emission Reductions Foregone for PARs 219 and 222.....	4-11
Table 5-1: Summary of PARs 219 and 222 and Project Alternatives	5-2
Table 5-2: Comparison of Adverse Environmental Impacts of the Alternatives	5-2
Table 5-1: Equipment That Could Be Adjusted in Size or Excluded from PAR 219 and 222	5-4

LIST OF FIGURES

Figure 2-1: South Coast Air Quality Management District.....	2-1
Figure 3-1: 2005 Annual Baseline Visibility	3-26

CHAPTER 1

EXECUTIVE SUMMARY

Introduction

California Environmental Quality Act

Previous CEQA Documentation

Intended Uses of this Document

Areas of Controversy

Executive Summary

INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977¹ as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin referred to herein as the District. The SCAQMD Governing Board adopts policies and regulations that promote clean air within its jurisdiction. The SCAQMD Governing Board obtains its authority to adopt, amend or repeal rules and regulations from Health and Safety Code §§ 40000, 40001, and 40440.

SCAQMD Regulation II consists of rules that guide the SCAQMD's permitting and filing systems. This regulation includes rules and requirements for submitting permit applications; content of permit applications, permits to construct and operate; denying, posting, transferring or voiding permits; plans required for permits; exemptions to written permits and filing requirements for specific sources not requiring a written permit.

SCAQMD Rule 219 currently provides an exemption from written permits for certain equipment, processes, or operations that produce small amounts of air contaminants. The exemption from a written permit requirement provided by Rule 219 is only applicable if the equipment, process, or operation is in compliance with subdivision (t) - recordkeeping.

SCAQMD Rule 222 currently provides an alternative to SCAQMD written permits by allowing certain emission sources that meet predetermined criteria to register the emission source in a filing program. Rule 222 requires owners and operators of specified emission sources to submit information regarding emissions, including, but not limited to; (1) a description of the emission source; (2) data necessary to estimate emissions from the emission source; and (3) information to determine whether the emission source is operating in compliance with applicable SCAQMD, state, and federal rules and regulations. Thus, the filing system allows the SCAQMD staff to develop accurate emissions in the emissions inventories for the respective source categories, and include operating conditions, while providing relief from the traditional detailed permitting system and its associated cost.

SCAQMD staff periodically evaluates permit data, performs technology surveys, or reviews information provided by a variety of affected equipment owners to determine if equipment should be removed or added to Rules 219 and 222. The most current evaluation of equipment identified several categories of equipment to be added to Rule 219, Rule 222, or both rules as described in the project description in Chapter 2 of this ~~Draft~~ Final Environmental Assessment. For this reason, SCAQMD staff is proposing amendments to Rules 219 and 222 that would add new equipment, processes, or operations, as applicable, that would either be exempt from requiring a permit or would be provided a streamlined filing process in lieu of a written permit.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The proposed amendments to Rules 219 and 222 are considered a “project” as defined by CEQA. CEQA requires that the potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented if feasible. The purpose of CEQA is to inform the project's decision making body, in the case of the currently proposed project the SCAQMD's Governing Board, public agencies, and interested parties of potential adverse environmental

¹ The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch 324 (codified at Health & Safety Code, §§40400-40540).

impacts that could result from implementing the proposed project and to identify feasible mitigation measures or alternatives to lessen any significant impact.

California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of an environmental impact report once the Secretary of the Resources Agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the Secretary of the Natural Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110 (the rule which implements the SCAQMD's certified regulatory program). CEQA and Rule 110 require that potential adverse environmental impacts of proposed projects be evaluated and that feasible methods to reduce or avoid significant adverse environmental impacts of these projects be identified.

The SCAQMD, as Lead Agency for the proposed project, prepared a Notice of Preparation of a Draft Environmental Assessment (EA)/Initial Study (NOP/IS) which identified environmental topics to be analyzed in the a-Draft EA. The IS identified the environmental topic “air quality and greenhouse gas (GHG) emissions,” specifically operational air quality, as an area that may be adversely affected by the proposed project. No other potentially significant adverse environmental impacts were identified. The NOP/IS was circulated to solicit input from the public agencies and interested parties regarding the environmental analysis to be included in the ~~Draft~~-EA. The NOP/IS was circulated for a 30-day public review period from October 18, 2012, to November 16, 2012. During that public comment period, the SCAQMD received no comment letters. The NOP/IS is attached to this EA as Appendix B.

This ~~Draft-Final~~ EA has been prepared as a public disclosure document intended to: (a) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental impacts of the proposed project; and, (b) be used as a tool by decision makers to facilitate decision making on the proposed project. As indicated in the IS, the only environmental topic identified in the IS that could be adversely affected by the proposed project is air quality and greenhouse gas (GHG) emissions, specifically operational air quality, which is further analyzed in this ~~Draft-Final~~ EA to determine whether or not the potential impacts are significant.

~~Any comments received during the public review period on the analysis presented in this Draft Final EA will be responded to and included in the Final EA. During that public comment period, the SCAQMD received no comment letters. Prior to making a decision on the proposed amendments to Rules 219 and 222, the SCAQMD Governing Board must review and certify the Final EA, including responses to comments, if any comment letters are received.~~

PREVIOUS CEQA DOCUMENTATION

This ~~Draft-Final~~ EA is a comprehensive environmental document that includes an analysis of potentially significant adverse environmental impacts from the proposed amendments to Rules 219 and 222. SCAQMD rules, as ongoing regulatory programs, have the potential to be revised over time due to a variety of factors (e.g., regulatory decisions by other agencies, new data, and lack of progress in advancing the effectiveness of control technologies to comply with requirements in technology forcing rules, etc.). Rule 219 was originally adopted on January 9, 1976, and has subsequently been amended seventeen times; the currently proposed amendment would be the eighteenth amendment to the rule. It was most recently amended on June 1, 2007. Rule 222 was originally adopted on September 11, 1998, and has been amended three times; the currently proposed amendment would be the fourth amendment to the rule. It was most recently amended on December 5, 2008. The amendments to Rules 219 and 222 would affect equipment

currently regulated by the February 1, 2008 amendments to Rule 1110.2 (piston-type internal combustion engines used at remote two-way radio transmission towers) and September 9, 2011 amendments to Rule 1147 (diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel-fueled heaters, and diesel-fueled boilers).

The following summarizes the previously prepared CEQA document for Rules 219, 222, 1110.2 and 1147 and is included for informational purposes. The following documents can be obtained by submitting a Public Records Act request to the SCAQMD's Public Records Unit. The following is a summary of the contents of these documents.

Previous Rule 219 and Rule 222 CEQA Documentation

Notice of Exemption for Proposed Amended Rule 219, June 3, 1988

The 1988 amendments to Rule 219 included adding equipment not requiring a written permit, e.g., internal combustion engines rated less than or equal to 50 brake horsepower, combustion equipment rated less than or equal to 2,000,000 British thermal units (Btu), plasma arc cutting, wax burnout kilns, shell and shell core molds, etc. Other modifications were made to standardize rule language to be consistent with other rules. No potentially significant adverse environmental impacts were identified. Therefore, the project was determined to be exempt from the requirements of CEQA.

Final Environmental Assessment, September 11, 1992, SCAQMD No. 920721

An EA was prepared for the 1992 amendments to Rule 219 to evaluate potential adverse impacts from equipment added to the permit system (e.g., equipment that emit carcinogenic air contaminants subject to Rule 1401, hazardous treatment systems, specific air conditioning equipment, etc.), exempt equipment currently subject to permit (e.g., boilers, process heaters and any combustion equipment with a heat input rate of no more than 2,000,000 Btu per hour; specific fuel cells, etc.) and clarification of language in one particular subdivision without changing its intent. The Draft EA was released for a 30-day public review and comment period from July 24, 1992, to August 24, 1992. No significant adverse impacts were identified. Two comment letters were received, and response to comments were included in the Final EA. No comments were received which change any of the conclusions reached in the draft document.

Notice of Exemption for Proposed Amended Rule 219, August 12, 1994

The 1994 amendments included adding the following equipment to Rule 219, which exempted them from permit requirements: dynamometers, test cells, and test stands; internal combustion engines used for training; emergency ventilation for ammonia refrigeration systems; automatic soldering equipment, plasma arc-cutting, vacuum metalizing chambers, coffee roasting equipment, textile dryers, polyester resin or gel coat spraying equipment, tin can hammermills, etc. No potentially significant adverse environmental impacts were identified. Therefore, the project was determined to be exempt from the requirements of CEQA.

Notice of Exemption for Proposed Amended Rule 219, December 13, 1996

The 1996 amendments to Rule 219 exempted from permit requirements specific equipment categories (e.g., CFC recovery and recycling systems and portable internal combustion engines) that were evaluated and found to emit negligible amounts of emissions and/or are regulated by other government agencies, such as the U.S. Environmental Protection Agency. The amendments also removed small degreasing units previously exempt from Rule 219, which requires them to obtain SCAQMD permits to operate. These units were regulated under federal National Emission Standards for Hazardous Air Pollutants (NESHAPs) and no further

requirements besides permitting were imposed. No potentially significant adverse environmental impacts were identified. Therefore, the project was determined to be exempt from the requirements of CEQA.

Final Environmental Assessment for: Proposed Amended Rule 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II, Proposed Rule 222 - Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II, Proposed Amended Rule 401 - Visible Emissions (August 20, 1998, SCAQMD No. 980421JDN)

The 1998 amendments established a pilot program to implement a permit streamlining project by removing commercial charbroilers and negative air machines from Rule 219 and placing them in PR 222, a filing informational program. PAR 219 exempted cleaning equipment using 50 g/L VOC content solvent from written permit requirements, which was consistent with amendments to Rules 1122 and 1171. Other types of equipment were exempted from written permits in PAR 219 due to negligible emissions. Wet gate printer and larger rubber presses were removed from PAR 219 and included into the written permit system due to emissions. These sources were determined to be associated with public nuisances potential and/or toxic emissions. Rule 401 was amended to provide three years for specific under-fired charbroilers to meet the less stringent state visibility standard, until such time as cost-effective control technology can be identified and installed. A Draft Environmental Assessment (EA) with no significant adverse impacts was prepared because, although the Draft EA concluded that the proposed rule has the potential to adversely affect air quality and other environmental areas, the impacts were not expected to be significant. The Draft EA was released for a 30-day review period (July 16, 1998, to August 14, 1998). Ten comment letters were received, and response to comments were included in the Final EA. No comments were received which change any of the conclusions reached in the draft document.

Final Environmental Assessment for Proposed Amended Rule 1401– New Source Review of Toxic Air Contaminants and Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II (July 2, 1999, SCAQMD No. 990520MK)

The 1999 revisions included adding nine toxic compounds for which OEHHHA established new acute risk values to Table I of Rule 1401. This project also included a recommendation by the Permit Streamlining Task Force to amend the applicability section of Rule 1401 and the preamble of Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II. These changes were intended to prevent bringing Rule 219 exempt equipment into the permit system unless emissions from the equipment caused an exceedance of the Rule 1401 health risk threshold requirements, thereby requiring permit actions to limit the health risk from the equipment. A Draft Environmental Assessment (EA) with no significant adverse impacts was prepared because, although the Draft EA concluded that the proposed rule has the potential to adversely affect air quality and other environmental areas, the impacts were not expected to be significant. The Draft EA was circulated for a 30-day public review and comment period which ended June 18, 1999. No written comments on the Draft EA were received.

Notice of Exemption for Proposed Amended Rule 219 and Rule 222, May 19, 2000

The May 2000 amendments to Rule 219 clarified requirements for categories of equipment that were exempt from operating permits. Specifically, the amendments clarified requirements for cleaning, combustion, food processing, powder coating, abrasive blasting, electrolytic plating, and anodizing equipment. The amendments to Rule 222 added boilers and process heater emission sources that are exempted from permit requirements pursuant to Rule 219 to Rule 222. This amendment added approximately 12,000 boilers and process heaters with a rated heat input

from 1,000,000 Btu per hour up to and including 2,000,000 Btu per hour to the filing program under Rule 222. This enabled staff to simplify and streamline the permitting process in a filing program for low-emitting equipment as an alternative to the conventional permitting process. No potentially significant adverse environmental impacts were identified. Therefore, the project was determined to be exempt from the requirements of CEQA.

Final Environmental Assessment for Proposed Amended Rules 219 - Equipment Not Requiring a Written Permit Pursuant to Regulation II, 481 - Spray Coating Operations, 1107 - Coating of Metal Parts and Products; 1141 - Control of Volatile Organic Compound Emissions from Resin Manufacturing; 1141.1 - Coatings and Ink Manufacturing, 1141.2 - Surfactant Manufacturing and 1162 - Polyester Resin Operations (November 9, 2000, SCAQMD No. 001006MK, SCAG Clearinghouse I20000499)

The November 2000 amendments to Rules 219, 481, 1107, 1141, 1141.1, 1141.2, and 1162 consisted of adding alternative monthly limits to the specified rules where there were daily limits. Adding the monthly limits allowed facilities subject to these rules to use the monthly recordkeeping option so long as they meet certain criteria. The project also included minor administrative changes that to update definitions and remove exemptions that had expired. A Draft Environmental Assessment (EA) with no significant adverse impacts was prepared because, although the Draft EA concluded that the proposed rule has the potential to adversely affect air quality and other environmental areas, the impacts were not expected to be significant. The Draft EA was released on October 10, 2000 for a 30-day public review and comment period ending November 8, 2000. No comment letters were received from the on the Draft EA.

Notice of Exemption for Proposed Amended Rule 219, July 11, 2003

The 2003 amendments to 219 exempted from permit requirements equipment and processes with low emission levels to maintain consistency with other SCAQMD rules and regulations (e.g. Rules 442, 1171 and 1122). No potentially significant adverse environmental impacts were identified. Therefore, the project was determined to be exempt from the requirements of CEQA.

Final Environmental Assessment for Proposed Rule 1148.1 - Oil and Gas Production Wells and Proposed Amended Rule 222 - Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II (February 26, 2004, SCAQMD No. 031120JK)

The purpose of Rule 1148.1 is to reduce VOC emissions from well cellars as well as from sources of untreated process gas located at oil and gas production facilities. The February 2004 amendments to Rule 222 required the operator of oil production wells to file and submit information about the source with the SCAQMD in lieu of a written permit. The Draft EA was released on October 10, 2000 for a 30-day public review and comment period from November 20, 2003, to December 19, 2003. Two comment letters were received, and responses to comments were included in the Final EA. No comments were received which change any of the conclusions reached in the draft document.

Notice of Exemption for Proposed Amended Rule 219, December 3, 2004

The Health and Safety Code-mandated written permits for certain agricultural sources. Amendments to Rule 102 included adding or amending definitions necessary to implement the Health and Safety Code requirements. The 2004 December amendments to Rules 201, 201.1, 202 and 203 established permitting procedures for these sources. Amendments to Rule 219 identified the agricultural sources that were no longer exempt from written permits and when permit applications were to be submitted. Rule 312 set the special permitting fees for existing

agricultural sources. No potentially significant adverse environmental impacts were identified. Therefore, the project was determined to be exempt from the requirements of CEQA.

Notice of Exemption for Proposed Amended Rule 219, May 5, 2006

The May 2006 amendments to Rule 219 included adding the following equipment categories to the list of equipment exempt from operating permits: test cell and test stands for burner testing; various control equipment venting basic equipment; flywheel type shot peening; curing equipment for printing and reproduction; etc. The amendments also clarified the applicability criteria and the intent of underlying requirements for the storage and transfer of liquefied gases. Other minor changes were made for clarity and consistency throughout the rule. No potentially significant adverse environmental impacts were identified. Therefore, the project was determined to be exempt from the requirements of CEQA.

Notice of Exemption for Proposed Amended Rule 219, July 14, 2006

The July 2006 amendments to Rule 219 clarified the applicability criteria and permit requirements for certain non-emergency internal combustion engines and gasoline transfer and dispensing equipment operated by agricultural sources. No potentially significant adverse environmental impacts were identified. Therefore, the project was determined to be exempt from the requirements of CEQA.

Notice of Exemption for Proposed Amended Rule 219, June 1, 2007

The 2007 amendments to Rule 219 harmonized the exemption levels applicable to UV/EB curable materials and other coating, ink and adhesive application operations in an equitable manner. Certain operations that are otherwise individually exempt from permits pursuant to Rule 219, but that emit four tons per year or more of VOCs in aggregate at any one facility were added to Rule 222. The amendments also exempted certain low emitting operations. Other minor changes were added to improve clarity and consistency throughout the rule. No potentially significant adverse environmental impacts were identified. Therefore, the project was determined to be exempt from the requirements of CEQA.

Notice of Exemption for Proposed Amended Rule 222, December 5, 2008

New categories of equipment or operations were added to Rule 222 to incorporate certain requirements in SCAQMD Rule 219 and in the CARB ATCM for Compression Ignition Engines. The following categories of equipment or operations were added to Rule 222: printing and related coating and/or laminating equipment and associated dryers and curing equipment; roller to roller coating systems; coating or adhesive application or laminating equipment; drying equipment associated with coating or adhesive application or laminating equipment; stationary or certain portable emergency diesel-fired internal combustion engines at any agricultural operations; and stationary or portable non-emergency diesel-fired internal combustion engines rated greater than 50 brake horsepower (bhp) at agricultural operations with actual emissions less than the amounts listed in Rule 219; certain equipment, processes, or operations emitting in aggregate four tons or more of VOCs per year at a single facility and existing gasoline storage and dispensing equipment with a capacity greater than or equal to 251 gallons at agricultural operations. No potentially significant adverse environmental impacts were identified for the proposed project. Therefore, the project was determined to be exempt from the requirements of CEQA.

Related Rule 1110.2 CEQA Documentation

Related CEQA documents for Rule 1110.2 prepared in the past are summarized in this subsection because a number of equipment types being added to PARs 219 and 222 would be

removed from Rule 1110.2 and they would no longer be required to comply with rule requirements.

Final Environmental Assessment for Proposed Amended Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Internal Combustion Engines (ICEs) (December 2007, SCAQMD No. 280307JK)

The 2007 amendments to Rule 1110.2 were made to: 1) improve the compliance record of engines by requiring improved monitoring, recordkeeping and reporting; 2) achieve further emission reductions based on the cleanest available technologies; and 3) address rule changes recommended by U.S. EPA Region IX. PAR 1110.2 was determined to be significant for aesthetics, PM_{2.5} operational emissions, and hazardous impacts from accidental release of aqueous ammonia or liquefied natural gas. The Draft EA for the PAR 1110.2 was circulated for a 45-day public review and comment period from November 2, 2007 to December 18, 2007. One comment letter was received, and responses to comments were included in the Final EA. No comments were received which change any of the conclusions reached in the draft document.

Addendum to the 2007 Final Environmental Assessment for Proposed Amended Rule 1110.2 – Emissions from Gaseous - and Liquid-Fueled Engines (August 2012, SCAQMD No. 120817JK)

The 2012 amendments to Rule 1110.2 re-adopted the previously adopted (February 1, 2008) emission limits for biogas-powered internal combustion engines that never went into effect. The amendment also provided additional time for compliance; a compliance option for a longer averaging time for engines with superior performance in achieving lower mass emissions; and a compliance option that further extends the effective dates for certain engines based on a compliance flexibility fee. Analysis of the project indicated that an Addendum to the 2007 Final EA prepared pursuant to CEQA Guidelines §15164 was the appropriate CEQA document for this project, because SCAQMD staff has concluded that the proposed amendments only result in some changes or additions to the 2007 Final EA that did not trigger the conditions described in CEQA Guidelines §15162 calling for preparation of a subsequent CEQA document. Based on the analysis in the addendum, PAR 1110.2 was not expected to generate new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Since PAR 1110.2 was not expected generate new significant environmental effects or as substantial increase in the severity of previously identified significant effects, no new mitigation measures or alternatives have been proposed. No changes to existing mitigation measures or alternatives were proposed.

Related Rule 1147 CEQA Documentation

Related CEQA documents for Rule 1147 prepared in the past are summarized in this subsection because a number of equipment types being added to PARs 219 and 222 would be removed from Rule 1110.2 and they would no longer be required to comply with rule requirements.

Final Environmental Assessment for Proposed Rule 1147 – NO_x Reductions from Miscellaneous Sources (December 2008, SCAQMD No. 081015JJI; State Clearinghouse No. 2008101082)

Rule 1147 was adopted to implement 2007 AQMP control measures CMB-01 (NO_x Reductions from Non-RECLAIM Ovens, Dryers, and Furnaces) and MCS-01 (Facility Modernization) to achieve NO_x reductions from miscellaneous gas and liquid fuel fired combustion equipment, including, but not limited to: ovens, dryers, dehydrators, heaters, kilns, calciners, furnaces, heated pots, cookers, roasters, fryers, closed and open heated tanks and evaporators, distillation units, degassing units, incinerators, and soil remediation units. A Draft EA for the adoption of

Rule 1147 was released for a 30-day public review and comment period from October 16, 2008 to November 14, 2008. No comment letters were received from the public relative to the Draft EA. The environmental analysis in the Draft EA concluded that the adoption of proposed Rule 1147 would not generate any significant adverse environmental impacts.

Final Subsequent Environmental Assessment for Proposed Amended Rule 1147 – NO_x Reductions from Miscellaneous Sources August 2011 (SCAQMD No. 02012011BAR, State Clearinghouse No: 2011011088)

The 2011 amendments to Rule 1147 provided a delay in the NO_x emission limit compliance dates for equipment subject to Rule 1147. The amendments also limited the requirements for fuel and time meters. Part of the intent of PAR 1147 was to reduce compliance costs due to emissions testing and clarified existing requirements. The proposed project was expected to result in delayed emissions reductions from equipment subject to this rule. Ultimately, however, PAR 1147 would achieve the same reductions as the existing rule by 2014. A Draft SEA was released for a 45-day public review and comment period from April 6, 2011 to May 20, 2011 which identified the topic of “air quality and greenhouse gas emissions,” specifically operational air quality, as an environmental topic that would exceed the SCAQMD’s significance thresholds associated with implementing the proposed project. One comment letter was received, and responses to comments were included in the Final EA. No comments were received which change any of the conclusions reached in the draft document.

INTENDED USES OF THIS DOCUMENT

In general, a CEQA document is an informational document that informs a public agency’s decision-makers and the public generally of potentially significant adverse environmental effects of a project, identifies possible ways to avoid or minimize the significant effects, and describes reasonable alternatives to the project (CEQA Guidelines §15121). A public agency’s decision-makers must consider the information in a CEQA document prior to making a decision on the project. Accordingly, this ~~Draft-Final~~ EA is intended to: (a) provide the SCAQMD Governing Board and the public with information on the environmental effects of the proposed project; and, (b) be used as a tool by the SCAQMD Governing Board to facilitate decision making on the proposed project.

Additionally, CEQA Guidelines §15124(d)(1) requires a public agency to identify the following specific types of intended uses of a CEQA document:

1. A list of the agencies that are expected to use the EA in their decision-making;
2. A list of permits and other approvals required to implement the project; and,
3. A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.

To the extent that local public agencies, such as cities, county planning commissions, etc., are responsible for making land use and planning decisions related to projects that must comply with the requirements in the proposed project, they could possibly rely on this EA during their decision-making process. Similarly, other single purpose public agencies approving projects at facilities complying with the proposed project may rely on this EA.

There are no permits or other approvals required to implement the proposed project. Moreover, the project is not subject to any other related environmental review or consultation requirements.

AREAS OF CONTROVERSY

CEQA Guidelines §15123(b)(2) requires a public agency to identify the areas of controversy in the CEQA document, including issues raised by agencies and the public. Over the course of developing the proposed project, the predominant concerns expressed by representatives of industry and environmental groups, either in public meetings or in written comments, regarding the proposed project are highlighted in Table 1-1.

Table 1-1
Areas of Controversy

	Area of Controversy	Topics Raised by the Public	SCAQMD Evaluation
1.	Permitting system is too burdensome for low-emitting sources	Business organizations and autobody shop owners with equipment currently subject to Rule 1147 have requested that any equipment that emits less than one pound per day of NOx should be exempt from the rule's NOx control requirements.	NOx is not the only pollutant of concern. For example, paint spray booths with heaters or small ovens subject to Rule 1147 may also generate VOC or toxic air contaminant (TAC) emissions, as well as NOx emissions that may require emissions control or offsets under the written permit system. SCAQMD staff evaluates specific types of equipment to ensure that Rule 219 and 222 sources do not have criteria pollutant or TAC consequences that might be of concern. SCAQMD staff has not identified any other equipment that would be suitable for exemption from written permit other than those in PARs 219 and 222.
2.	Limit on rating of new gas turbines (including microturbines)	There is no limit on the number of microturbines that can be installed under the existing Rule 219. PARs 219 and 222 propose adding a two megawatt limit per facility on microturbines. Microturbines are considered to be a clean technology and only generate small amounts of criteria pollutants; therefore, certain owner/operators believe that the proposed two megawatt per facility limit is not needed	Unlike most equipment in Rules 219 and 222, microturbines, typically involve multiple sources installed at a single facility. Rule 219 and 222 was not designed for the installation of multiple sources at a single facility. The proposed two megawatt limit per facility in PAR 219 and 222 would prevent circumvention of the intent of Rules 219/222 by preventing a facility operator from installing a large number of low megawatt microturbines instead of one microturbine greater than two megawatts.
	The volume of the passive carbon adsorbers without mechanical ventilation would be increased from 55 gallons to 120 gallons	SCAQMD staff has had several meetings with local city and county agencies in regard to the use of passive carbon adsorption systems that are used to control hydrogen sulfide (H ₂ S) odors at truck lines, sewer connections and transfer stations.	The exemption would address local city and county agencies concerns about exempting passive carbon adsorbers without mechanical ventilation from written permits.

Pursuant to CEQA Guidelines §15131(a), “Economic or social effects of a project shall not be treated as significant effects on the environment.” CEQA Guidelines §15131(b) states further, “Economic or social effects of a project may be used to determine the significance of physical changes caused by the project.” Physical changes caused by the proposed project have been evaluated in Chapter 4 of this EA. No direct or indirect physical changes resulting from economic or social effects have been identified as a result of implementing the proposed project.

Of the topics discussed to address the concerns raised relative to CEQA and the secondary impacts that would be associated with implementing the proposed project, to date, no other controversial issues were raised as a part of developing the proposed project.

EXECUTIVE SUMMARY

CEQA Guidelines §15123 requires a CEQA document to include a brief summary of the proposed actions and their consequences. In addition, areas of controversy including issues raised by the public must also be included in the executive summary (see preceding discussion). This ~~Draft~~-Final EA consists of the following chapters: Chapter 1 – Executive Summary; Chapter 2 – Project Description; Chapter 3 – Existing Setting, Chapter 4 – Potential Environmental Impacts and Mitigation Measures; Chapter 5 – Project Alternatives; Chapter 6 - Other CEQA Topics and various appendices. The following subsections briefly summarize the contents of each chapter.

Summary of Chapter 1 – Executive Summary

Chapter 1 includes a discussion of the legislative authority that allows the SCAQMD to amend and adopt air pollution control rules, identifies general CEQA requirements and the intended uses of this CEQA document, and summarizes the remaining five chapters that comprise this ~~Draft~~-Final EA.

Summary of Chapter 2 - Project Description

PAR 219 would provide an exemption to a written permit or filing requirements for certain additional equipment, processes, or operations that produce small amounts of air contaminants. Sources added only to PAR 219 would not be issued operating parameters from the SCAQMD. PAR 222 would provide access to a simple and efficient filing system for certain additional low-emitting emission sources. Sources added to PAR 222 would continue to be subject to existing written permit conditions and would be issued operating parameters. SCAQMD staff is also proposing to add some types of equipment to both PAR 219 (to exempt them from permit requirements) and PAR 222 (to track equipment by imposing filing requirements). Equipment added to both PARs 219 and 222 include certain types of equipment currently regulated by Rule 1110.2 and Rule 1147: pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel-fueled heaters, diesel-fueled boilers, and piston-type internal combustion engines located at remote two-way radio transmission towers. These sources would no longer be subject to Rules 1110.2 or 1147. Sources that would be added to PAR 219, but not PAR 222, include air pollution control devices for Rule 219 equipment; cosmetic filling stations and related filling equipment; laser cutting, etching and engraving equipment; and aerosol can recycling systems. Text would also be added to PAR 219 and PAR 222 to clarify the intent of existing provisions and the enforceability of the conditions imposed by PAR 222.

Other minor changes are also proposed for clarity and consistency throughout the rule. A copy of PARs 219 and 222 can be found in Appendix A of this ~~Draft~~-Final EA.

Summary of Chapter 3 - Existing Setting

Pursuant to the CEQA Guidelines §15125, Chapter 3 – Existing Setting, includes descriptions of those environmental areas that could be adversely affected by the proposed project as identified in the NOP/IS (Appendix C). The following subsection briefly highlights the existing setting for the topic of air quality and GHG emissions which has been identified as having potentially significant adverse affects from implementing the proposed project.

Air Quality and GHG Emissions

Air quality in the area of the SCAQMD's jurisdiction has shown substantial improvement over the last two decades. Nevertheless, some federal and state air quality standards are still exceeded frequently and by a wide margin. Of the National Ambient Air Quality Standards (NAAQS) established for seven criteria pollutants (ozone, lead, sulfur dioxide, nitrogen dioxide, carbon monoxide, PM10 and PM2.5), the area within the SCAQMD's jurisdiction is only in attainment with carbon monoxide, sulfur dioxide, and nitrogen dioxide standards. Air monitoring for PM10 indicates that SCAQMD has attained the NAAQS but USEPA has not yet approved the SCAQMD's request for re-designation. Effective December 31, 2010, the Los Angeles County portion of the SCAQMD has been designated as non-attainment for the new federal standard for lead, based on emissions from two specific facilities. Chapter 3 provides a brief description of the existing air quality setting for each criteria pollutant, as well as the human health effects resulting from exposure to each criteria pollutant. In addition, this section includes a discussion on greenhouse gases (GHGs), climate change and toxic air contaminants (TACs).

Summary of Chapter 4 - Environmental Impacts

CEQA Guidelines §15126(a) requires that a CEQA document shall identify and focus on the “significant environmental effects of the proposed project.” Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects.

The proposed project could cause significant adverse environmental impacts to operational air quality emissions from NOx emission reductions foregone. Specifically, analysis of these environmental impacts revealed that potentially significant operational air quality impacts may result from exempting PARs 219 and 222 equipment from requirements under Rule 1110.2 and Rule 1147. Implementation of PARs 219 and 222 means that the NOx concentration limits for affected Rule 1110.2 and Rule 1147 equipment would no longer be required. Because NOx concentration limits required by Rule 1110.2 and Rule 1147 would no longer apply, no additional physical changes requiring construction would be required for PARs 219 and 222 equipment under the proposed project.

PARs 219 and 222 would result in 139 pounds of NOx emission reductions foregone. NOx emissions reductions foregone are not direct NOx emissions, but the loss of expected emission reductions. For this analysis, to be conservative, NOx emission reductions foregone are treated as NOx emissions and compared to the operational air quality NOx significance threshold. The amount of NOx emission reductions foregone is expected to exceed the operational air quality NOx significance threshold of 55 pounds per day. For these reasons, operational air quality impacts associated with implementation of PARs 219 and 222 are potentially significant.

Cumulative air quality impacts from the proposed project and all other AQMP control measures considered together are not expected to be significant because the amount of NOx emission reductions to be achieved by the AQMP are expected to meet the emission reduction projections

and commitments made by control measures in the 2012 AQMP². The reason for this conclusion is that, overall, both Rules 1147 and 1110.2 are expected to result in net NOx emission reductions from affected equipment. Thus, despite the NOx emission reductions foregone, cumulative air quality impacts are not expected.

Thus, in consideration of the total net accumulated emission reductions projected overall, the loss of NOx emission reductions would not interfere with the air quality progress and attainment demonstration projected in the AQMP. Indeed, the 2012 AQMP indicated that, based on future anticipated overall reduction in emissions, the Basin would demonstrate attainment with the federal eight-hour ozone ambient air quality standard in 2023 for the 88 parts per billion concentration standard and demonstrate attainment with the federal 24-hour PM2.5 35 microgram per meter cubed concentration standard in 2014 (SCAQMD, 2012). Therefore, cumulative air quality impacts from the proposed project and all other AQMP control measures, when considered together, are not expected to be significant because implementation of all AQMP control measures is expected to result in net emission reductions and overall air quality improvement.

Potential Environmental Impacts Found Not To Be Significant

The Initial Study for the proposed project includes an environmental checklist of approximately 17 environmental topics to be evaluated for potential adverse impacts from a proposed project. Review of the proposed project at the NOP/IS stage identified one topic (air quality and GHG emissions) for further review. The Initial Study concluded that the project would have no significant direct or indirect adverse effects on the remaining environmental topic areas. No comment letters were received on the NOP/IS and none of the comments for the public hearings requested the analysis of any of the other topic areas. The screening analysis concluded that the following environmental areas would not be significantly adversely affected by the proposed project:

- aesthetics
- air quality and greenhouse gases during construction (and greenhouse gases during operation)
- agriculture and forestry resources
- biological resources
- cultural resources
- energy
- geology and soils
- hazards and hazardous materials
- hydrology and water quality
- land use and planning
- mineral resources
- noise
- population and housing
- public services
- recreation
- solid/hazardous waste
- transportation/traffic

² SCAQMD, 2012 AQMP, <http://www.aqmd.gov/aqmp/2012aqmp/index.htm>.

Consistency

The Southern California Association of Governments (SCAG) and the SCAQMD have developed, with input from representatives of local government, the industry community, public health agencies, the USEPA-Region IX and the California Air Resources Board (CARB), guidance on how to assess consistency within the existing general development planning process in the Basin. Pursuant to the development and adoption of its Regional Comprehensive Plan Guide (RCPG), SCAG has developed an Intergovernmental Review Procedures Handbook (June 1, 1995). The SCAQMD also adopted criteria for assessing consistency with regional plans and the AQMP in its CEQA Air Quality Handbook. The proposed project is considered to be consistent with SCAG's RCPG because it does not interfere with achieving any of the goals identified in any of the RCPG policies.

Other CEQA Topics

CEQA documents are required to address the potential for irreversible environmental changes, growth-inducing impacts and inconsistencies with regional plans. Consistent with the Final Program Environmental Impact Report (EIR)³ prepared for the 2012AQMP, additional analysis of the proposed project confirms that it would not result in irreversible environmental changes or the irretrievable commitment of resources, foster economic or population growth or the construction of additional housing, or be inconsistent with regional plans.

Summary Chapter 5 - Alternatives

Three alternatives to the proposed project are summarized in Table 1-2: Alternative A (No Project), Alternative B (Reduction in Size), and Alternative C (Excluded Equipment). Pursuant to the requirements in CEQA Guidelines §15126.6 (b) to mitigate or avoid the significant effects that a project may have on the environment, a comparison of the potentially significant adverse operational air quality impacts from each of the project alternatives for the individual rule components that comprise the proposed project is provided in Table 1-3. Aside from operational air quality impacts, no other potentially significant adverse impacts were identified for the proposed project or any of the project alternatives. The proposed project is considered to provide the best balance between emission reductions and meeting the objectives of the project. Therefore, the proposed project is preferred over the project alternatives.

Table 1-2
Summary of PARs 219 and 222 and Project Alternatives

Project	Project Description
Proposed Project	Existing list of affected equipment that contribute to significant adverse operation NOx air quality impacts would include power pressure washers, asphalt day tankers, tar pots, food ovens, portable diesel-fueled heaters, diesel-fueled boilers, and piston-type internal combustion engines used at remote two-way radio transmission towers.
Alternative A (No Project)	PARs 219 and 222 would not be amended. The net result is that equipment would still be subject to permitting requirements and Rule 1110.2 and Rule 1147 equipment would continue to be subject to their respective rules.

³ SCAQMD, 2012b, Final Program Environmental Impact report for the 2012 AQMP

Table 1-2 (Continued)
Summary of PARs 219 and 222 and Project Alternatives

Project	Project Description
Alternative B (Reduction in Size)	The affected equipment size for asphalt day tankers and tar pots would be lowered.
Alternative C (Excluded Equipment)	Power pressure washers and food ovens would not be included in PARs 219 and 222.

Table 1-3
Comparison of Adverse Environmental Impacts of the Alternatives

Category	Proposed Project	Alternative A: No Project	Alternative B: Reduction in Size	Alternative C: Excluded Equipment
Operational NOx Air Quality Impacts	139 pounds of NOx emission reductions foregone per day.	No change from existing setting, (i.e., 139 pounds of NOx emission reductions from affected Rule 1110.2 and 1147 equipment)	136 pounds of NOx emission reductions foregone per day.	103 pounds of NOx emission reductions foregone per day.
Significant?	Yes	No	Yes	Yes

CHAPTER 2

PROJECT DESCRIPTION

Project Location

Project Background

Project Objective

Project Description

PROJECT LOCATION

The SCAQMD has jurisdiction over an area of 10,473 square miles (referred to hereafter as the District), consisting of the four-county South Coast Air Basin and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The 6,745 square-mile Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB and MDAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of both Riverside County and the SSAB and is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 2-1).

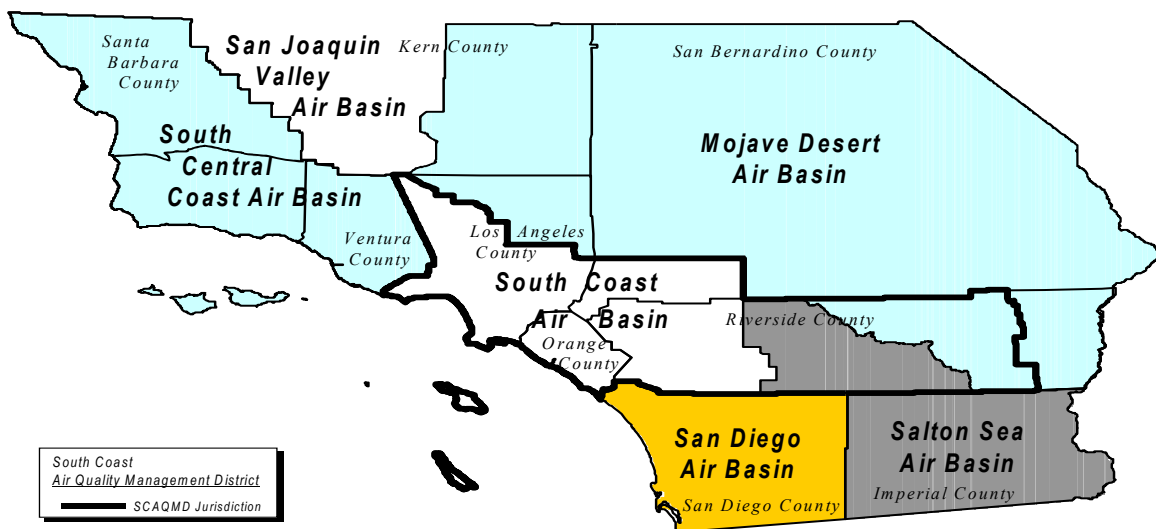


Figure 2-1
Boundaries of the South Coast Air Quality Management District

PROJECT BACKGROUND

Rule 219

Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II - is an administrative rule that identifies equipment, processes, or operations that emit small amounts of air contaminants that do not require written permits, unless such equipment, process or operation is subject to subdivision (s) - Exceptions. In addition, an exemption from a written permit requirement provided by this rule is only applicable if the equipment, process, or operation is in compliance with subdivision (t) - Recordkeeping.

Rule 219 was adopted on January 9, 1976, and has subsequently been amended seventeen times to add low-emitting equipment identified by the public or by SCAQMD staff through routine evaluation of permitted equipment; this proposed amendment would be the eighteenth amendment to the rule. It was most recently amended on June 1, 2007.

Rule 219 affects any industry that uses equipment, processes, or operations that produce small amounts of air contaminants by providing an exemption to requiring a written permit for certain types of equipment included in the Rule as written. These types of equipment, processes, or operations that emit small amounts of air contaminants can be at small business operations or large source operations. Rule 219 equipment is still subject to any applicable Regulation IV and XI rules.

Rule 222

Rule 222 - Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant To Regulation II - provides an alternative to SCAQMD written permits by allowing certain emission sources that meet predetermined criteria to register the emission source in the Rule 222 filing program. Affected emission sources are smaller emitters and less complex sources than those typically requiring permits. Rule 222-affected emission sources do not require a written permit, but do require filing pursuant to the Rule 222 filing program. Rule 222-affected equipment is also subject to written operating conditions, which result in limiting unnecessary or excessive air contaminant emissions. The Rule 222 filing program offers simplicity and efficiency in processing the applications for the emission sources for these low-emitting emission sources when compared to the traditional written permit, which typically includes permit pre-screening, permit analysis, and permit evaluation, originally designed to evaluate more complex, higher emitting emission sources. In addition, the filing program for such equipment allows the SCAQMD staff to develop accurate emissions inventories for the respective source categories. Finally, the owner/operator would benefit from the faster turnaround time for processing a filing form and the reduced cost when compared to a typical written permit.

The current Rule 222 requires owners and operators of specified emission sources to submit information regarding emissions, including, but not limited to; (1) a description of the emission source; (2) data necessary to estimate emissions from the emission source; and (3) information to determine whether the emission source is operating in compliance with applicable SCAQMD, state, and federal rules and regulations.

Rule 222 was adopted on September 11, 1998, and has been amended three times; this proposed amendment would be the fourth amendment to the rule. It was most recently amended on December 5, 2008.

PROJECT OBJECTIVE

The objectives of PARs 219 and 222 are to:

1. Provide regulatory relief to operators of small NO_x emitting equipment that would otherwise be subject to the NO_x emission control requirements of Rule 1147 because no feasible retrofit NO_x emission control equipment is currently available for these categories of equipment, so the only compliance option would be limited to equipment replacement. Equipment replacement is inconsistent with the intent of Rule 1147, which was promulgated as an equipment retrofit rule not an equipment replacement rule.

2. Provide regulatory relief to operators of piston-type internal combustion engines used exclusively to generate electricity for remote two-way radio transmission towers and that meet the definition of this type of equipment in PAR 219 and PAR 222, that would otherwise be subject to Rule 1110.2, For the following reasons:
 - a. This type of equipment is located in remote locations typically at high elevations and diesel fuel is the only type of fuel that can last for sufficiently long periods of time in the event of inclement weather compared to other types of fuel; therefore, compliance options such as electricity (electricity lines are not typically available in remote areas) or fuels other than diesel fuel are not feasible; and
 - b. Maintenance and operation of air pollution control technologies and associated monitoring systems may not be possible during inclement weather at these remote stations.
3. Public safety requires consistent operation of piston-type internal combustion engines used exclusively to generate electricity for remote two-way radio transmission towers; therefore, because of the issues identified in #2 above, exempting this equipment from the requirements of Rule 1110.2 would ensure that two-way radio transmission towers would be available during emergencies.
4. Provide administrative relief for low-emitting equipment by not requiring a written permit pursuant to Rule 219, because the low emissions from affected equipment would not justify the administrative cost of processing and issuing written permits.
5. Provide administrative relief for low-emitting equipment by requiring simplified filing pursuant to Rule 222, because the low emissions from affected equipment would not justify the administrative costs of processing and issuing written permits for these types of equipment, which are substantially greater than Rule 222 filing fees.

PROJECT DESCRIPTION

The following is a summary of the proposed amendments to PARs 219 and 222. A copy of PARs 219 and 222 can be found in Appendix A.

PAR 219

Subdivision - Purpose

No change.

Subdivision (a) – Mobile Equipment

- (a)(5) This new paragraph would exempt pavement heating machines from written permits and clarification provided that this type of equipment consists of asphalt pavement heaters, which are any mobile equipment used for the purposes of road maintenance and new road construction provided a filing pursuant to Rule 222 is submitted to the SCAQMD Executive Officer.

Subdivision (b) – Combustion and Heat Transfer Equipment

- (b)(1) – This paragraph has been modified to also exempt piston type internal combustion engines, which are engines used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within one half mile radius, with a manufacturer's rating of 100 brake horsepower or less and fired exclusively on diesel #2 fuel from written permits. Stationary gas turbine engines, including micro-turbines, with a rated maximum heat input capacity of 3,500,000 British thermal units (Btu) per hour or less would be exempted, provided that the cumulative power output of all

such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation with the state of California or were in operation prior to the date of amendment provided a filing pursuant to Rule 222 is submitted to the SCAQMD Executive Officer. The proposal also would increase the rated maximum heat input capacity of gas turbine engines, including micro-turbines, exempted from written permits from 2,975,000 Btu per hour or less to 3,500,00 Btu per hour or less.

- (b)(2) – The maximum heat input rate would be changed to the rated maximum heat input capacity. This paragraph would include adding to the list of equipment exempt from written permits diesel-fueled boilers, process heater or any combustion equipment that have a rated maximum heat input capacity of 2,000,000 Btu per hour or less; are fueled exclusively with diesel #2 fuel; are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland, and the maximum NOx emission output of the equipment is less than one pound per day, uses less than 50 gallons of fuel per day, and the equipment has been in operation prior to the date of PAR 219 adoption, provided a filing pursuant to Rule 222 is submitted to the SCAQMD Executive Officer. This provision would not apply to piston type internal combustion engines or turbines. This provision would not apply whenever there are emissions other than products of combustion, unless the equipment is specifically exempt from written permits under another section of Rule 219, except for food ovens with a rated maximum heat input capacity of 2,000,000 Btu per hour or less that are fired exclusively on natural gas and where VOC emissions from yeast fermentation are less than one pound per day provided a filing pursuant to Rule 222 is submitted to the SCAQMD Executive Officer.
- (b)(3) – This new paragraph would add to the list of equipment exempt from written permits portable diesel fueled heaters with a rated maximum heat capacity of 250,000 Btu per hour or less and that are equipped with burner(s) fired exclusively on diesel fuel only provided a filing pursuant to Rule 222 is submitted to the SCAQMD Executive Officer.
- (b)(4) – This new paragraph would add to the list of equipment exempt from written permits power pressure washers and hot water or steam washers and cleaners equipped with a heater or burner that is designed to be fired on diesel fuel, has a rated maximum heat input capacity of 550,000 Btu per hour or less, is equipped with a non-resettable chronometer, the maximum NOx emission output of the equipment is less than one pound per day, and uses no more than 50 gallons of fuel per day provided a filing pursuant to Rule 222 is submitted to the SCAQMD Executive Officer.. The exemption would not apply to piston-type internal combustion engines or turbines. Electrically heated burners would be exempted from permit and the Rule 222 filing requirements.
- (b)(5) – The existing fuel cell exemption from written permits would be clarified by adding associated heating equipment, including heaters that have a rated maximum heat input capacity of greater than 2,000,000 Btu per hour provided that the supplemental heat used is 90,000 therms per year or less and a filing pursuant to Rule 222 is submitted to the SCAQMD Executive Officer. The process by which fuel cells produce electricity would also be clarified to be in an electro-chemical reaction.

Subdivision (c) – Structures and Equipment

No change.

Subdivision (d) – Utility Equipment - General

- (d)(10) – The volume of the passive carbon adsorbers without mechanical ventilation would be increased from 55 gallons to 120 gallons. Wastewater treatment plants would be added to this exemption from requirements for permits.

Subdivision (e) – Glass, Ceramic, Metallurgical Processing and Fabrication Equipment

- (e)(2)(G) – This provision for exempting glass processes from written permits would be expanded to include ceramic materials, such as glass and porcelain in order to clarify that ceramic material including porcelain is covered by this exemption. The exemption would also be expanded to include control equipment used to exclusively vent crucible furnaces, pot furnaces or induction furnaces.
- (e)(8) – This paragraph would be amended to add laser etching or engraving of metal (excluding stainless steel and alloys containing chromium, nickel, cadmium or lead) in the exemption from written permits for welding equipment exemption. The exemption would also state that laser cutters used to cut stainless steel or alloys of chromium, nickel cadmium or lead or laser cutters rated more than 400 watts and control equipment venting such equipment would not be included in the exemption. The exemption previously did not include plasma arc-cutting equipment that that were rated 136 amperes or more. The exemption would now not include any plasma arc-cutting equipment that is used to cut alloys containing chromium, nickel, cadmium or lead, as well as, stainless steel.

Subdivision (f) – Abrasive Blasting Equipment

No change.

Subdivision (g) – Machining Equipment

No change.

Subdivision (h) – Printing and Reproduction Equipment

- (h)(1) – The printing and related coating and/or laminating equipment exemption from written permits would be clarified to include associated air pollution control equipment provided that the air pollution control equipment is not required for source specific rule compliance.
- (h)(7) – The exemption from written permits for hand application of materials used in printing operations would be clarified to include associated air pollution control equipment unless the air pollution control equipment is required for source specific rule compliance.

Subdivision (i) – Pharmaceuticals, Cosmetics, Food Processing and Preparation Equipment

- (i)(7) The phrase “all of the product” would be changed to “the entire product” for clarification.
- (i)(9) Equipment used exclusively for packaging vitamins would be added to the exemption. The exemption would be clarified to be equipment specific, not facility specific, and would add the provision that the exemption includes waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter.
- (i)(10) The exemption from written permits would be clarified to be equipment specific, not facility specific, and a provision would be added that the exemption is applicable only when waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter are used.

- (i)(13) – An exemption would be added for charbroilers used for multi-family residential units used by owners/occupants for non-commercial purposes.

Subdivision (j) – Plastics, Composite and Rubber Processing Equipment

Minor modifications have been made to paragraphs (j)(1) and (j)(6) to improve clarity.

Subdivision (k) – Mixing, Blending and Packaging Equipment

- (k)(1) - The exemption from written permits for batch mixers would be clarified to include associated filling equipment.
- (k)(2) - The exemption from written permits for mixing and blending of materials would be clarified to include associated filling equipment.
- (k)(4) – This provision would be modified as follows; “to which powders are added” would be changed to “to which powders may be added” for clarification.
- (k)(5) – This new paragraph would provide an exemption from written permits for cosmetics filling stations where the filling equipment is hard piped to the cosmetics mixer or the holding tank feeding the filling equipment provided the mixer and holding tank would be added.
- (k)(8) – The exemption from written permits for equipment used exclusively to package sodium hypochlorite-based household cleaning and pool products would be clarified to state that the exemption applies to sodium hypochlorite-based pool products or sodium hypochlorite-based household cleaning products.

Subdivision (l) – Coating and Adhesive Process/Equipment

- (l)(6) – Air brushes would be added to the list of equipment exempt from written permits.
- (l)(8) – For clarification “hand applications” would replace “hand work.”

Subdivision (m) – Storage and Transfer Equipment

- (m)(7) – Hydraulic oils would be added to the exemption from written permits for refined lubricating oils. The exemption would be clarified to include associated control equipment used to exclusively vent such equipment.
- (m)(8) - The exemption from written permits would be clarified to include associated control equipment used to exclusively vent such equipment.
- (m)(9) – This exemption from written permits would be extended to include equipment used exclusively for natural gas, propane, and oil odorant storage, of less than 950 liters (251 gallons) capacity and associated transfer and control equipment used exclusively for such equipment provided a filing pursuant to Rule 222 is submitted to the SCAQMD Executive Officer would be exempted from written permits.
- (m)(11) – Tar pots (or tar kettles) would be added to this exemption from requirements for permits. This provision would be expanded to include equipment including tar pots with a maximum holding capacity of less than 600 liters (159 gallons) or more, but less than 3,785 liters (1,000 gallons) and equipped with burner(s) designed to fire exclusively on LPGs provided a filing pursuant to Rule 222 is submitted to the SCAQMD Executive Officer.
- (m)(23) – This new paragraph would exempt from written permits equipment, including asphalt day tankers, used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch, that is mounted on a motor vehicle, with a maximum holding capacity of 600 liters (159 gallons) or less or equipment, including asphalt day tankers, with a maximum

holding capacity of 600 liters (159 gallons) or more, but less than 18,925 liters (5,000 gallons) or less and equipped with burner(s) designed to fire exclusively on LPGs only provided a filling pursuant to Rule 222 is submitted to the SCAQMD Executive Officer.

Subdivision (n) – Natural Gas and Crude Oil Production Equipment

No change.

Subdivision (o) – Cleaning

(o)(4) – The exemption from written permits for hand application of solvents for cleaning purposes would be clarified to include associated air pollution control equipment, unless the air pollution control equipment is required for source specific rule compliance.

Subdivision (p) – Miscellaneous Process Equipment

- (p)(10) – Carpet and paper shearing would be added to the paper shredding exemption from written permits.
- (p)(22) – A new exemption from written permits would be added for equipment used to recycle aerosol cans by puncturing the can in an enclosed system which is vented through an activated carbon filter would be added. This exemption would only apply to aerosol recycling systems where the product within the aerosol can to be recycled would be used as part of their operation at the facility or facilities under common ownership.

Subdivision (q) – Agricultural Sources

No change.

Subdivision (r) – Registered Equipment and Filing Program

No change.

Subdivision (s) – Exemptions

No change.

Subdivision (t) – Recordkeeping

No change.

Subdivision (u) – Compliance Date

No change.

Additional changes would be made to improve readability.

PAR 222

Subdivision (a) – Purpose

No change.

Subdivision (b) – Applicability

- (b)(1) Language would be added requiring that owners/operators authorized to operate emission sources pursuant to Rule 222 would be required to operate those emission sources in compliance with any and all operating conditions imposed by the SCAQMD.
- Table I – The text pertaining to boiler or steam generators and process heaters would be modified as follows: “and produce less than one pound of NO_x emissions per day.”

- Table I would be expanded to extended the applicability of Rule 222 to the following sources/equipment:
 - Asphalt day tankers, with a maximum capacity greater than 600 liters (159 gallons) but no more than 18,925 liters (5,000 gallons) and equipped with a demister and burner(s) that are designed to fire exclusively on LPGs only;
 - Asphalt pavement heaters used for road maintenance and new road construction;
 - Diesel-fueled boilers that have a rated maximum heat input capacity of no more than 2,000,000 Btu/hour or less, are fired exclusively with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland and have been in operation prior to date of amendment;
 - Food ovens with a rated maximum heat input capacity of 2,000,000 Btu per hour or less, are fired exclusively on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day;
 - Fuel cells, which produce electricity in an electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane or solid oxide technologies and associated heating equipment, including heaters that have a rated maximum heat input capacity of 2,000,000 Btu per hour, provided that the supplemental heat used is 90,000 therms per year or less;
 - Micro-turbines, with a rated maximum heat input capacity of 3,500,000 Btu per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation with the state of California or were in operation prior to date of amendment;
 - Natural gas, propane, and oil odorant storage, of less than 950 liters (251 gallons) and associated transfer and control equipment.
 - Piston-type internal combustion engines used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a one half mile radius, has a manufacturer's rating of 100 brake horsepower or less, and are fired exclusively on diesel #2 fuel.
 - Portable diesel fueled heaters, with a rated maximum heat input capacity of 250,000 Btu per hour or less and are equipped with burner(s) designed to fire exclusively on diesel #2 fuel only;
 - Power pressure washers and hot water or steam washers and cleaners that are equipped with a heater or burner that is designed to be fired on diesel fuel, has a rated maximum heat input capacity of 550,000 Btu per hour or less, is equipped with a non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day and uses no more than 50 gallons of fuel per day;
 - Tar pots with a maximum storage capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and are equipped with burner(s) designed to fire exclusively on LPGs only

Subdivision (c) – Definitions

Definitions for asphalt day tankers; asphalt pavement heaters; diesel-fueled boilers; food ovens; fuel cells; micro-turbines; natural gas, propane and oil odorant storage equipment; piston-type internal combustion engines; portable diesel fueled heaters; power pressure washers and hot water or steam washers, and tar pots would be added.

Subdivision (d) – Requirements

- (d)(1)(B) This new subparagraph would require owners and operators of sources subject to PAR 222 to comply with all operating conditions imposed on the emissions source.

- (d)(1)(C) The requirement to periodically submit applicable information would be clarified to include all air pollution control equipment and pertinent data as necessary to estimate emissions from the source and determine that the emission source or equipment meets all compliance requirements with applicable rules and regulations for each emissions source subject the PAR 222.
- (d)(1)(D) This new subparagraph would require that on January 1, and each year thereafter, records be kept and made available to the SCAQMD upon request to provide operations data and any updated information on the emission sources or equipment applicable to PAR 222.
- (d)(1)(E) This subparagraph would be clarified to state that “all required” fees be paid pursuant to Rule 301.
- (d)(1)(F) This subparagraph would be modified to that a copy of the filing receipt for all emissions sources and equipment applicable to PAR 222 would be maintained “on-site” and for the “life of the emission sources or equipment and made available to the Executive Officer upon request.”
- (d)(1)(G) This subparagraph would be modified to require maintenance of records sufficient to verify the description of the emissions sources or equipment would also require data necessary to estimate output of emission sources, and records used to demonstrate compliance with operating conditions and with all applicable rules and regulations. The records would be required to be maintained for five years and made available to the Executive Officer upon request.
- (d)(1)(H) This condition prohibiting removal of any air pollution control equipment associated with applicable equipment subject to PAR 222 would be clarified to state “unless it can be demonstrated that the replacement” air pollution control equipment would reduce emissions at equal to or greater efficiency that the prior unit. The replacement air pollution control equipment would also need to be first approved in writing by the Executive Officer.
- (d)(3) This new paragraph makes it clear that “failure to comply with the provisions set forth in subparagraphs (d)(1)(A), (B), (C), (E), and (F) shall constitute a violation” of PAR 222.

Subdivision (e) – Compliance Dates

- (e)(4) This new paragraph would make it clear that “failure to comply with the provisions set forth in subparagraphs (b)(1), (b)(2), (e)(1) through, (e)(3), shall constitute a violation” of PAR 222.

CHAPTER 3

EXISTING SETTING

Introduction

Existing Setting

INTRODUCTION

In order to determine the significance of the impacts associated with a proposed project, it is necessary to evaluate the project's impacts against the backdrop of the environment as it exists at the time the NOP/IS is published. The CEQA Guidelines define “environment” as usually “the physical conditions that exist within the area which will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance” (CEQA Guidelines §15360; see also Public Resources Code §21060.5). Furthermore, a CEQA document must include a description of the physical environment in the vicinity of the project, as it exists at the time the NOP/IS is published, from both a local and regional perspective (CEQA Guidelines §15125). Therefore, the “environment” or “existing setting” against which a project's impacts are compared consists of the immediate, contemporaneous physical conditions at and around the project site (Remy, et al; 1996).

The following section summarizes the existing setting for air quality and GHG emissions which is the only environmental topic identified in the NOP/IS that may be adversely affected by the proposed project. The Final Program EIR for the 2012 AQMP also contains comprehensive information on existing and projected environmental settings for the topic of air quality and GHG emissions. Copies of the referenced document are available from the SCAQMD's Public Information Center by calling (909) 396-2039.

EXISTING SETTING

There are two main components to the proposed project: 1) proposed modifications/clarifications to equipment currently in Rule 219 or addition of equipment to Rule 219 only that are currently regulated by Rules 404, 405, 463, or 1171; and 2) the proposed addition of new equipment to both rules 219 and 222 that are currently regulated either Rule 1110.2 or Rule 1147. Rule 1110.2 currently limits NO_x emissions to 11 parts per million by volume, while equipment regulated by Rule 1147 must meet an emission limit of 30 ppm to 60 ppm of NO_x based on the type of equipment. Alternatively, equipment may meet a NO_x limit between 0.036 pound per million Btu and 0.080 pound per million Btu based on the type of equipment. The analysis of potentially significant adverse air quality impacts in Chapter 4 of this document is based solely on impacts from the new equipment categories that would be added to both Rules 219 and 222 because this equipment would no longer be subject to existing emission control requirements. It was also concluded in Chapter 4 that the remaining equipment categories, i.e., those that are already in Rule 219 or are being added only to Rule 219, would not generate any air quality impacts. Therefore, the following subsections briefly summarize information about those categories of equipment that would be added to both Rules 219 and 222.

Asphalt Day Tankers

Asphalt day tankers are currently subject to Rule 1147 and are proposed to be added to Rules 219 and 222 because, individually, their emissions are typically less than or equal to 0.5 pound per day. The SCAQMD database shows 72 permitted asphalt day tankers. Based on the review of the SCAQMD database, the maximum holding capacities of the asphalt day tankers range in size from 830 to 25,000 gallons and have a rated maximum input heat capacity ranging from 100,000 to 1,400,000 Btu/hour. The database also shows that 49 of these units are fired using LPGs, 21 units are fired with propane, one unit is fired with natural gas and one unit is fired with diesel fuel. Fifty-eight of the existing units would meet the PARs 219 and 222 criteria for

maximum holding capacity (600 liters (159 gallons), but less than 18,925 liters (5,000 gallons)) and fuel type (LPGs).

Diesel-fueled Boilers

Diesel-fueled boilers are currently subject to Rule 1147 and are proposed to be added to Rules 219 and 222 because, individually, their emissions are typically less than or equal to 0.5 pound per day. SCAQMD staff has identified five permitted portable diesel-fueled boilers in the district that would meet the parameters proposed in PARs 219 and 222, and are currently subject to Rule 1147.

Food Ovens

Food ovens are currently subject to Rule 1147 and are proposed to be added to Rules 219 and 222 because, individually, their emissions are typically less than or equal to 0.5 pound per day. SCAQMD staff has identified 55 permitted food ovens in the district.

Portable Diesel-fueled Heaters

Portable diesel-fueled heaters are currently subject to Rule 1147 and are proposed to be added to Rules 219 and 222 because, individually, their emissions are typically less than or equal to 0.5 pound per day. SCAQMD staff has identified nine permitted portable diesel heaters in the district that would meet the parameters proposed in PARs 219 and 222, and are currently subject to Rule 1147. Portable diesel fueled heaters are typically used in large areas where comfort heat is required but electricity and natural gas pipe lines are not available in the immediate area. In addition, propane and other gaseous fueled heaters prompt safety concerns should they leak fuel, which is heavier than air and can saturate the immediate area surrounding the heater. The portable diesel fueled heaters are common and can be obtained in variety of ratings (Btu). Based on the review of the SCAQMD database, the rated maximum heat input capacities of the portable diesel fueled heaters universe ranges from 160,000 to 219,000 Btu per hour. All nine of these units were fired on diesel fuel.

Power Pressure Washers

SCAQMD staff has identified 258 permitted power washers and hot water or steam washers and cleaners in the district that are considered to be small emission sources. The SCAQMD database also shows that 245 of these units were use diesel fuel, two units use LPG, three units use kerosene, and 26 units use a combination of diesel fuel, kerosene and fuel oil. Power pressure washers and hot water or steam washers and cleaners are quite popular in cleaning operations as they can be used to wash or steam clean machinery, buildings, pavement, and many other washing or cleaning uses with high-pressure spray. Power pressure washers and hot water or steam washers and cleaners normally consist of a reciprocating internal combustion piston-type engine, typically fueled by gasoline, which is used to drive the compressor pump to pressurize the water into a spray or a stream. The power pressure washers and hot water or steam washers and cleaners also employ a heater or burner that heats the water before it is dispensed from the equipment. The typical fuel used for the heater or burner is diesel fuel. The power pressure washer and hot water or steam washer and cleaner equipment incorporates a rubber hose that extends from the equipment to a spray wand that is equipped with a trigger for the operator to discharge the pressurized spray.

Currently power pressure washers and hot water or steam washers and cleaners are not exempt unless they are equipped with a heater or burner that is fired on natural gas. Since the majority of the pressure washers do not have natural gas fired heaters or burners they do not qualify for the exemption for combustion and heat transfer equipment in Rule 219.

Based on the review of the SCAQMD database, the rated maximum heat input capacities of the entire universe of pressure washers and hot water or steam washers and cleaners ranges from 100,000 to 1,500,000 Btu per hour. SCAQMD staff determined that out of the entire universe of power washers and hot water or steam washers and cleaners 96 percent of the 271 total units had rated maximum heat input capacities less than 550,000 Btu per hour. Therefore, SCAQMD staff is proposing a 550,000 Btu per hour ceiling.

Tar Pots

Tar Pots, also commonly known as tar kettles, are used in roofing construction and repair operations, from residential single-family homes to apartment buildings and office buildings. The purpose of the tar pot is two-fold, one to transport a volume of tar to a jobsite and two, to melt the asphalt or coal tar pitch using an onboard burner that directs heat to the tar continuously to melt the tar and keep it in a molten state. Roofing contractors need to keep the tar in a molten state so it can be removed from the tar pot and directly applied to the working surface. Tar pots normally range in maximum holding capacities and can range from 100 gallons and can be as large as 1,000 gallons. The burners for the tar pots are fired on various fuels such as LPG and diesel-based fuels and can produce maximum heat input capacities from 38,000 Btu per hour up to 2,400,000 Btu per hour.

The SCAQMD database currently shows 163 permitted tar pots. Based on the review of the SCAQMD database, the staff found that the maximum holding capacities of the tar pots range from 200 to 1,665 gallons and the rated maximum heat input capacities range from 38,188 to 2,400,000 Btu per hour. The SCAQMD database also shows that 104 of these units are fired on LPG, 52 units are fired on propane, two units are fired on diesel fuel, and five units show an undeclared fuel source. One hundred forty-seven of the existing units would meet the PARs 219 and 222 criteria for maximum holding capacity (600 liters (159 gallons), but less than 3,785 liters (1,000 gallons)) and fuel type (LPGs).

Piston-type Internal Combustion Engines

There are 16 piston-type internal combustion engines used at remote two-way radio transmission towers, currently subject to Rule 1110.2, that are solely diesel fueled and are operating in rural areas where there are no provisions for natural gas, electricity or alternate fuels. Two engines are operated at each affected facility. Each engine is used alternately for a combined operation of 24 hours a day, seven days per week, and 52 weeks a year.

Information on Other Types of Equipment Affected by the Proposed Project

The following paragraphs provide information on other types of equipment affected by the proposed project, that do not contribute to potentially significant adverse air quality impacts

Asphalt Pavement Heaters: The SCAQMD database shows two permitted asphalt pavement heaters. One asphalt pavement heater has a rated maximum heat input capacity of 180,000

British thermal units (Btu) per hour, with kerosene-fired burners, and the other one has a rated maximum heat input capacity of 660,938 Btu per hour, with propane-fired burners. Asphalt pavement heaters are mobile equipment and are used by road construction personnel to heat asphalt or coal tar pitch for purposes of road maintenance or new road construction operations.

Micro-turbines: There are currently 16 permitted micro-turbines operating in the district. The micro-turbines are much smaller internal combustion turbines when compared to conventional turbines, and like the conventional turbines they typically drive a generator which produces electrical power. The electrical power can be used by the facility or sold back to the electrical provider responsible for servicing the grid. Micro-turbines can run on a variety of fuels such as natural gas, diesel fuel, gasoline, landfill gases, and digester gases. The micro-turbines are generally grouped in numbers and a typical landfill permit, where they are most used. Up to ten micro-turbines have been permitted at a single site, each rated at 420,000 Btu/hour, using landfill gas as the fuel source and each micro-turbine driving 30 kilowatt generator. If the micro-turbines use landfill gas or digester gas as a fuel source, they require a written permit. Staff reviewed the SCAQMD inventory for the micro-turbines and found that all 16 micro-turbines use landfill gas as a fuel source.

SCAQMD staff received information from one manufacturer of micro-turbines that the 3,500,000 Btu per hour micro-turbines operated more efficiently than the older units that were up to 2,975,000 Btu per hour which is the reason for the Btu per hour ceiling limit for this proposed exemption. In an effort to provide equity among different distributed energy generation sources, SCAMD staff is also proposing to restrict the micro-turbines that are eligible for the Rule 222 filing program by allowing micro-turbines, with a maximum heat input capacity 3,500,000 British thermal units (Btu) per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation with the state of California or were in operation prior to date of amendment.

Fuel Cells: SCAQMD staff has identified two permitted fuel cells in the district that would be included in in PARs 219 and 222. The SCAQMD database currently shows that both fuel cells use molten carbonate technology that use supplemental heaters to accelerate the heat required to control the heat up phase for the carbonate bed before the fuel cells can be used to produce electrical power generation. Currently, both fuel cells are in the application phase with SCAQMD permit engineers.

SCAQMD staff is proposing to clarify the exemption for fuel cells based on the supplemental heater usage rate of 90,000 therms per year. SCAQMD staff based the 90,000 therms per year on a worst case scenario where the total NOx emissions for a start-up heater were equivalent to 30 ppm, which is equivalent to 0.0363 lbs per million Btu. The 90,000 therms equate to 326.7 pounds per year of NOx emissions or less than one pound per day, on average.

Laser Cutters or Etchers: SCAQMD staff has identified 36 permitted laser cutters or etchers in the district that would meet the conditions proposed in PARs 219 and 222. LASER – Light Amplification by Stimulated Emission of Radiation – is a process where light energy is converted into heat energy and is focused into a point or laser beam, which is directed onto the working surface of an object. The laser beam of a laser cutting machine melts, burns, vaporizes

away or is blown away by a jet of gas which provides a desirable high quality surface finish in materials such as flat sheet metal. There are three types of laser cutters that are used in industrial manufacturing applications:

1. The CO₂ laser is used to cut, bore, and engrave materials such as mild steel, aluminum, stainless steel, titanium, paper, wax, plastics, wood, and fabrics.
2. The neodymium (Nd) laser provides high-energy pulsing low repetition speeds and is typically used for boring.
3. The neodymium yttrium-aluminum-garnet (Nd-YAG) laser, which provides very high-energy pulse, is used for boring, engraving, and trimming operations.

Laser etching or engraving equipment is commonly used on metals, plastics, wood, and any other surface that can be etched or engraved. The laser beam etches or engraves by heating up the surface of the object so that the surface of the material will either vaporize or surface fracture and the heated surface flakes off, resulting in the desired engraving on the surface of the object. Staff has observed several industries that use laser etching or engraving in place of the more conventional mechanical etching and engraving. The laser etching or engraving equipment is offered in many sizes, based on maximum power output, with many of the units being very small and thus is a small emissions source. The emissions inventory for 31 permitted laser engravers and etchers shows three pounds per day of particulate matter, less than 10 microns (PM₁₀). In addition, the five permitted laser cutters shows 1.9 pounds per day of PM₁₀ and combined, laser cutters, engravers and etchers account for 4.9 pounds of PM₁₀ per day. Currently, there are no PM emission limits for these types of equipment. These 36 laser cutters, engravers and etchers do not process certain metals such as stainless steel, or alloyed materials that contain chromium, cadmium, nickel or lead; these metals when subjected to the intense heat of the laser flash off toxic materials. Laser cutters that process these type metals must go through a complete engineering evaluation before a written permit is considered.

Odorant Storage Tanks: SCAQMD staff has observed odorant storage tanks at multiple public utility natural gas transfer facilities. Officials from the public utilities informed SCAQMD staff that the Department of Transportation (DOT) regulations require that natural gas be odorized before it's transferred to end users. The larger facilities typically have 1,000 and 1,500 gallon odorant storage tanks, which are permitted with SCAQMD, but there are several facilities that have smaller odorant storage tanks. Currently, one facility has a 120 gallon capacity odorant storage tank, whereas, sixteen other facilities have 60 gallon capacity odorant storage tanks. The odorant storage tanks contain a blend of 50 percent tertiary-butyl mercaptain and 50 percent tetrahydrothiophene. The odorant storage tanks are refilled every other year and the odorant is typically dispensed into gas lines at a rate of seven pounds per million cubic feet (7 lb/MMft³). SCAQMD staff has determined that the smaller odorant tanks would be viable candidates for exemption in PAR 219, which would then be transitioned into the PA 222 filing program along with any appropriate operating conditions.

Aerosol Can Disposal Recycling System: Aerosol paint cans and aerosol solvent cans such as engine degreasers, brake cleaners, and electrical component cleaners are very popular and convenient sources for small painting and repair operations that require application of solvents. Both aerosol types are frequently used in plants as well as out in field to perform routine

maintenance and repair operations for various types of equipment. These small aerosol cans, typical in sizes from 12 fluid ounces to approximately 18 fluid ounces, are easily carried in the pockets of workers, which has promoted their popularity in industrial uses. However, when the aerosol cans are emptied, workers typically dispose the empty can in a common refuse container. The emptied aerosol cans still retain a small amount of residual paint or solvent and propellant inside and presents an environmental concern when the empty can is disposed.

Several facilities have been using the Aerosolv Aerosol Can Disposal Recycling System to recycle the remaining content left inside the empty aerosol can. The Aerosolv recycling system has two components, the press and the filter, and these two components are installed onto a common 30 to 55 gallon drum container lid. The press simply threads into the two-inch bung fitting while the filter threads into the ¾-inch bung fitting. The filter contains an activated carbon canister that adsorbs the VOCs that would otherwise emit from the drum to the atmosphere. The press is used by an operator who places an aerosol can in the press by inverting the aerosol can so the spray head points downward, into the sleeve. The securing clamp is then adjusted to secure the aerosol can firmly, and then the operator pushes down on the lever which then drives a punch pin into the dome area of the aerosol can thus allowing the contents to discharge inside the drum. The depressurized aerosol is then stockpiled for metal recycling. The Aerosolv Aerosol Can Disposal Recycling System is the only aerosol can recycling technology of its type and is certified by the U.S. EPA’s Environmental Technology Verification Program. This program is described by the U.S. EPA as a “*Program [that] verifies the performance of innovative technologies that have the potential to improve protection of human health and the environment.*”

Baseline Emission Inventory

Most of the PAR 219 and/or PAR 222 affected equipment would be operated in the same fashion as under the existing permit system. The two exceptions to this are the piston-type internal combustion engines with a manufacturer’s rating of 100 brake horsepower or less that are used exclusively for electrical generation at remote two-way radio transmission towers, which are currently regulated by Rule 1110.2; and Rule 1147 equipment (affected portable pressure washers, asphalt day tankers, tar pots, small food ovens, portable diesel-fueled heaters, and diesel-fueled boilers). Actual existing NO_x emissions from PAR 219 and PAR 222 affected equipment are presented in Table 3-1. Detailed calculations are included in Appendix C.

Table 3-1
NOx Baseline Emission Inventory for Rules 219 and 222 Equipment

Equipment Categories Potentially Affected by the Proposed Project	Number of Existing Permitted Units	Actual Existing Emissions (lb/day)
Power Pressure Washers	258	24
Asphalt Day Tankers	58	22
Tar Pots	147	76
Small Ovens	55	32
Portable Diesel-fueled Heaters	9	2.2
Diesel-fueled Boiler	5	1.5
Piston-type Internal Combustion Engines Used at Remote Two-Way Radio Transmission Towers	16	59
Total Daily NOx Emissions		224

Air Quality and Greenhouse Gas Emissions

This section provides an overview of air quality in the district. A more detailed discussion of current and projected future air quality in the district, with and without additional control measures can be found in the Final Program EIR for the 2012 AQMP (Chapter 3).

It is the responsibility of the SCAQMD to ensure that state and federal ambient air quality standards are achieved and maintained in its geographical jurisdiction. Health-based air quality standards have been established by California and the federal government for the following criteria air pollutants: ozone, CO, NO₂, PM₁₀, PM_{2.5} SO₂ and lead. These standards were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution. The California standards are more stringent than the federal standards and in the case of PM₁₀ and SO₂, far more stringent. California has also established standards for sulfates, visibility reducing particles, hydrogen sulfide, and vinyl chloride. The state and national ambient air quality standards for each of these pollutants and their effects on health are summarized in Table 3-2. The SCAQMD monitors levels of various criteria pollutants at 34 monitoring stations. The 2011 air quality data from SCAQMD's monitoring stations are presented in Table 3-3.

TABLE 3-2
State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	State Standard^a	Federal Primary Standard^b	Most Relevant Effects
Ozone (O₃)	1-hour	0.09 ppm (180 µg/m ³)	No Federal Standard	(a) Short-term exposures: 1) Pulmonary function decrements and localized lung edema in humans and animals; and, 2) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (b) Long-term exposures: Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (c) Vegetation damage; and, (d) Property damage.
	8-hour	0.070 ppm (137 µg/m ³)	0.075 ppm (147 µg/m ³)	
Suspended Particulate Matter (PM₁₀)	24-hour	50 µg/m ³	150 µg/m ³	(a) Excess deaths from short-term exposures and exacerbation of symptoms in sensitive patients with respiratory disease; and (b) Excess seasonal declines in pulmonary function, especially in children.
	Annual Arithmetic Mean	20 µg/m ³	No Federal Standard	
Suspended Particulate Matter (PM_{2.5})	24-hour	No State Standard	35 µg/m ³	(a) Increased hospital admissions and emergency room visits for heart and lung disease; (b) Increased respiratory symptoms and disease; and (c) Decreased lung functions and premature death.
	Annual Arithmetic Mean	12 µg/m ³	15.0 µg/m ³	
Carbon Monoxide (CO)	1-Hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	(a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and, (d) Possible increased risk to fetuses.
	8-Hour	9 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	

TABLE 3-2 (Concluded)
State and Federal Ambient Air Quality Standards

Pollutant	Averaging Time	State Standard ^a	Federal Primary Standard ^b	Most Relevant Effects
Nitrogen Dioxide (NO₂)	1-Hour	0.18 ppm (339 µg/m ³)	0.100 ppm (188 µg/m ³)	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and, (c) Contribution to atmospheric discoloration.
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	0.053 ppm (100 µg/m ³)	
Sulfur Dioxide (SO₂)	1-Hour	0.25 ppm (655 µg/m ³)	75 ppb (196 µg/m ³)–	Broncho-constriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma.
	24-Hour	0.04 ppm (105 µg/m ³)		
Sulfates	24-Hour	25 µg/m ³	No Federal Standard	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; and, (f) Property damage
Hydrogen Sulfide (H₂S)	1-Hour	0.03 ppm (42 µg/m ³)	No Federal Standard	Odor annoyance.
Lead (Pb)	30-Day Average	1.5 µg/m ³	No Federal Standard	(a) Increased body burden; and (b) Impairment of blood formation and nerve conduction.
	Calendar Quarter	No State Standard	1.5 µg/m ³	
	Rolling 3-Month Average	No State Standard	0.15 µg/m ³	
Visibility Reducing Particles	8-Hour	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent.	No Federal Standard	The Statewide standard is intended to limit the frequency and severity of visibility impairment due to regional haze. This is a visibility based standard not a health based standard. Nephelometry and AISI Tape Sampler; instrumental measurement on days when relative humidity is less than 70 percent.
Vinyl Chloride	24-Hour	0.01 ppm (26 µg/m ³)	No Federal Standard	Highly toxic and a known carcinogen that causes a rare cancer of the liver.

a The California ambient air quality standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, and PM_{2.5} are values not to be exceeded. All other California standards shown are values not to be equaled or exceeded.

b The national ambient air quality standards, other than O₃ and those based on annual averages, are not to be exceeded more than once a year. The O₃ standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above the standards is equal to or less than one.

KEY: ppb = parts per billion parts of air, t volume
 ppm = parts per million parts of air, volume
 µg/m³ = micrograms per cubic meter mg/m³ = milligrams per cubic meter

TABLE 3-3
2011 Air Quality Data – South Coast Air Quality Management District

CARBON MONOXIDE (CO)^a				
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. ppm, 1-hour	Max. Conc. ppm, 8-hour
LOS ANGELES COUNTY				
1	Central Los Angeles	365	2.8	2.4
2	Northwest Coastal Los Angeles County	360	3.0	1.3
3	Southwest Coastal Los Angeles County	364	2.3	1.8
4	South Coastal Los Angeles County 1	365	3.2	2.6
4	South Coastal Los Angeles County 2	--	--	--
4	South Coastal LA County 3	354	3.7	3.3
6	West San Fernando Valley	355	3.2	2.8
7	East San Fernando Valley	365	2.8	2.4
8	West San Gabriel Valley	365	2.9	2.2
9	East San Gabriel Valley 1	365	2.4	1.4
9	East San Gabriel Valley 2	362	1.4	1.1
10	Pomona/Walnut Valley	364	2.1	1.6
11	South San Gabriel Valley	365	2.7	2.4
12	South Central Los Angeles County	364	6.0	4.7
13	Santa Clarita Valley	363	1.2	0.8
ORANGE COUNTY				
16	North Orange County	365	3.4	2.1
17	Central Orange County	365	2.7	2.1
18	North Coastal Orange County	344	2.9	2.2
19	Saddleback Valley	365	1.4	0.8
22	Norco/Corona	--	--	--
23	Metropolitan Riverside County 1	365	2.0	1.4
23	Metropolitan Riverside County 2	365	2.7	1.5
23	Mira Loma	361	2.2	1.4
24	Perris Valley	--	--	--
25	Lake Elsinore	365	1.7	0.7
29	Banning Airport	--	--	--
30	Coachella Valley 1**	--	--	--
30	Coachella Valley 2**	350	1.1	0.6
SAN BERNARDINO COUNTY				
32	Northwest San Bernardino Valley	365	1.8	1.3
33	Southwest San Bernardino Valley	--	--	--
34	Central San Bernardino Valley 1	365	1.6	1.1
34	Central San Bernardino Valley 2	365	1.9	1.7
35	East San Bernardino Valley	--	--	--
37	Central San Bernardino Mountains	--	--	--
38	East San Bernardino Mountains	--	--	--
DISTRICT MAXIMUM			6	4.7
SOUTH COAST AIR BASIN			6	4.7

KEY:

ppm = parts per million

-- = Pollutant not monitored

** Salton Sea Air Basin

^a The federal 8-hour standard (8-hour average CO > 9 ppm) and state 8-hour standard (8-hour average CO > 9.0 ppm) were not exceeded. The federal and state 1-hour standards (35 ppm and 20 ppm) were not exceeded either.

TABLE 3-3 (Continued)
2011 Air Quality Data – South Coast Air Quality Management District

OZONE (O ₃)										
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. in ppm 1-hr	Max. Conc. in ppm 8-hr	4th High Conc. ppm 8-hr	No. Days Standard Exceeded				
						Health Advisory	Federal		State	
						≥ 0.15 ppm 1-hr	Old > 0.12 ppm 1-hr	Current >0.075 ppm 8-hr	Current > 0.09 ppm 1-hr	Current > 0.070 ppm 8-hr
LOS ANGELES COUNTY										
1	Central Los Angeles	365	0.087	0.080	0.065	0.060	0	0	0	0
2	Northwest Coastal Los Angeles County	360	0.098	0.095	0.071	0.061	0	0	2	0
3	Southwest Coastal Los Angeles County	360	0.078	0.076	0.067	0.062	0	0	0	0
4	South Coastal Los Angeles County 1	363	0.073	0.072	0.061	0.059	0	0	0	0
4	South Coastal Los Angeles County 2	--	--	--	--	--	--	--	--	--
4	South Coastal LA County 3	360	0.074	0.066	0.063	0.057	0	0	0	0
6	West San Fernando Valley	365	0.130	0.129	0.103	0.091	3	26	17	35
7	East San Fernando Valley	364	0.120	0.111	0.084	0.081	0	6	8	10
8	West San Gabriel Valley	365	0.107	0.101	0.084	0.077	0	5	5	13
9	East San Gabriel Valley 1	365	0.111	0.108	0.092	0.082	0	12	13	19
9	East San Gabriel Valley 2	362	0.134	0.133	0.111	0.095	4	30	35	40
10	Pomona/Walnut Valley	364	0.119	0.111	0.096	0.086	0	16	15	24
11	South San Gabriel Valley	362	0.096	0.086	0.074	0.061	0	0	1	1
12	South Central Los Angeles County	362	0.082	0.080	0.065	0.061	0	0	0	0
13	Santa Clarita Valley	363	0.144	0.129	0.122	0.101	3	31	31	52
ORANGE COUNTY										
16	North Orange County	365	0.095	0.091	0.074	0.069	0	0	1	3
17	Central Orange County	365	0.088	0.085	0.072	0.064	0	0	0	1
18	North Coastal Orange County	360	0.093	0.084	0.077	0.063	0	1	0	2
19	Saddleback Valley	365	0.094	0.092	0.083	0.074	0	2	0	5
RIVERSIDE COUNTY										
22	Norco/Corona	-	-	-	-	-	-	-	-	-
23	Metropolitan Riverside County 1	--	--	--	--	--	--	--	--	--
23	Metropolitan Riverside County 2	365	0.128	0.127	0.115	0.106	4	67	52	92
23	Mira Loma	--	--	--	--	--	--	--	--	--
24	Perris Valley	362	0.126	0.117	0.104	0.096	1	36	32	63
25	Lake Elsinore	364	0.125	0.125	0.112	0.094	2	54	44	77
29	Banning Airport	365	0.133	0.123	0.106	0.092	1	28	19	45
30	Coachella Valley 1**	355	0.105	0.094	0.085	0.073	0	14	1	27
30	Coachella Valley 2**	362	0.127	0.127	0.111	0.100	3	41	35	59
SAN BERNARDINO COUNTY										
32	Northwest San Bernardino Valley	365	0.145	0.134	0.122	0.098	5	36	36	45
33	Southwest San Bernardino Valley	--	--	--	--	--	--	--	--	--
34	Central San Bernardino Valley 1	365	0.144	0.140	0.124	0.105	5	39	39	53
34	Central San Bernardino Valley 2	365	0.135	0.125	0.121	0.101	2	39	40	66
35	East San Bernardino Valley	364	0.151	0.135	0.133	0.113	7	80	64	96
37	Central San Bernardino Mountains	360	0.160	0.135	0.136	0.106	8	84	58	103
38	East San Bernardino Mountains	--	--	--	--	--	--	--	--	--
DISTRICT MAXIMUM			0.160	0.140	0.136	0.113	8	84	64	103
SOUTH COAST AIR BASIN			0.160	0.140	0.136	0.113	16	106	90	125

KEY:

ppm = parts per million

-- = Pollutant not monitored

** Salton Sea Air Basin

TABLE 3-3 (Continued)
2011 Air Quality Data – South Coast Air Quality Management District

NITROGEN DIOXIDE (NO₂)^b					
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	1-hour Max. Conc. ppb, 1,	1-hour 98 th Percentile Conc. ppb,	Annual Average AAM Conc. ppb
LOS ANGELES COUNTY					
1	Central Los Angeles	365	109.6	67.0	23.1
2	Northwest Coastal Los Angeles County	360	81.3	58.2	13.9
3	Southwest Coastal Los Angeles County	365	97.6	64.8	13.4
4	South Coastal Los Angeles County 1	365	106.4	67.6	17.7
4	South Coastal Los Angeles County 2	--	--	--	--
4	South Coastal LA County 3	359	90.0	74.0	21.2
6	West San Fernando Valley	359	56.1	53.8	14.9
7	East San Fernando Valley	365	67.8	56.2	22.1
8	West San Gabriel Valley	359	87.3	72.8	20.3
9	East San Gabriel Valley 1	356	79.5	65.1	19.0
9	East San Gabriel Valley 2	361	77.6	53.9	12.9
10	Pomona/Walnut Valley	364	87.3	66.7	24.6
11	South San Gabriel Valley	362	90.6	72.0	23.7
12	South Central Los Angeles County	361	75.4	65.3	18.6
13	Santa Clarita Valley	360	60.1	46.8	13.3
ORANGE COUNTY					
16	North Orange County	365	69.8	60.7	17.7
17	Central Orange County	365	73.8	60.8	16.8
18	North Coastal Orange County	350	60.5	52.8	10.0
19	Saddleback Valley	--	--	--	--
RIVERSIDE COUNTY					
22	Norco/Corona	--	--	--	--
23	Metropolitan Riverside County 1	359	63.3	56.5	16.6
23	Metropolitan Riverside County 2	364	57.1	50.4	16.9
23	Mira Loma	364	58.8	51.8	15.3
24	Perris Valley	--	--	--	--
25	Lake Elsinore	365	50.3	41.3	9.6
29	Banning Airport	--	--	--	--
30	Coachella Valley 1**	350	60.7	50.2	9.5
30	Coachella Valley 2**	350	44.7	39.4	8.0
SAN BERNARDINO COUNTY					
32	Northwest San Bernardino Valley	353	68.5	60.1	19.6
33	Southwest San Bernardino Valley	--	--	--	--
34	Central San Bernardino Valley 1	365	76.4	64.6	21.1
34	Central San Bernardino Valley 2	365	61.9	52.9	16.9
35	East San Bernardino Valley	--	--	--	--
37	Central San Bernardino Mountains	--	--	--	--
38	East San Bernardino Mountains	--	--	--	--
DISTRICT MAXIMUM			109.6	72.8	24.6
SOUTH COAST AIR BASIN			109.6	72.8	24.6

KEY:

ppb = parts per billion

AAM = Annual Arithmetic Mean

-- = Pollutant not monitored

** Salton Sea Air Basin

^b

The NO₂ federal 1-hour standard is 100 ppb and the annual standard is annual arithmetic mean NO₂ > 0.0534 ppm. The state 1-hour and annual standards are 0.18 ppm and 0.030 ppm.

TABLE 3-3 (Continued)
2011 Air Quality Data – South Coast Air Quality Management District

SULFUR DIOXIDE (SO₂)^c				
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Maximum Conc. ppb, 1-hour	Maximum Conc. ppb, 24-hour
LOS ANGELES COUNTY				
1	Central Los Angeles	331	19.8	5.6
2	Northwest Coastal Los Angeles County	--	--	
3	Southwest Coastal Los Angeles County	365	11.5	3.3
4	South Coastal Los Angeles County 1	365	14.8	4.3
4	South Coastal Los Angeles County 2	--	--	
4	South Coastal LA County 3	350	43.3	11.6
6	West San Fernando Valley	--	--	
7	East San Fernando Valley	363	9.0	
8	West San Gabriel Valley	--	--	
9	East San Gabriel Valley 1	--	--	
9	East San Gabriel Valley 2	--	--	
10	Pomona/Walnut Valley	--	--	
11	South San Gabriel Valley	--	--	
12	South Central Los Angeles County	--	--	
13	Santa Clarita Valley	--	--	
ORANGE COUNTY				
16	North Orange County			
17	Central Orange County	--	--	
18	North Coastal Orange County	--	--	2.0
19	Saddleback Valley	357	7.7	
RIVERSIDE COUNTY				
22	Norco/Corona	--	--	
23	Metropolitan Riverside County 1	365	51.3	11.4
23	Metropolitan Riverside County 2	--	--	
23	Mira Loma	--	--	
24	Perris Valley	--	--	
25	Lake Elsinore	--	--	
29	Banning Airport	--	--	
30	Coachella Valley 1**	--	--	
30	Coachella Valley 2**	--	--	
32	Northwest San Bernardino Valley	--	--	
33	Southwest San Bernardino Valley	--	--	
34	Central San Bernardino Valley 1	365	12.3	4.0
34	Central San Bernardino Valley 2	--	--	
35	East San Bernardino Valley	--	--	
37	Central San Bernardino Mountains	--	--	
38	East San Bernardino Mountains	--	--	
DISTRICT MAXIMUM			51.3	11.6
SOUTH COAST AIR BASIN			51.3	11.6

KEY:

ppb = parts per billion

-- = Pollutant not monitored

** Salton Sea Air Basin

^c The federal SO₂ 1-hour standard is 75 ppb (0.075 ppm). The state standards are 1-hour average SO₂ > 0.25 ppm and 24-hour average SO₂ > 0.04 ppm.

TABLE 3-3 (Continued)
2011 Air Quality Data – South Coast Air Quality Management District

SUSPENDED PARTICULATE MATTER PM10 ^d						
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. $\mu\text{g}/\text{m}^3$, 24-hour	No. (%) Samples Exceeding Standard		Annual Average AAM Conc. $\mu\text{g}/\text{m}^3$
				Federal $> 150 \mu\text{g}/\text{m}^3$, 24-hour	State $> 50 \mu\text{g}/\text{m}^3$, 24-hour	
LOS ANGELES COUNTY						
1	Central Los Angeles					
2	Northwest Coastal Los Angeles County	59	53	0	1(2%)	29.0
3	Southwest Coastal Los Angeles County	--	--	--	--	--
4	South Coastal Los Angeles County 1	59	41	0	0	21.6
4	South Coastal Los Angeles County 2	60	43	0	0	24.2
4	South Coastal LA County 3	60	50	0	0	28.7
6	West San Fernando Valley	--	--	--	--	--
7	East San Fernando Valley	--	--	--	--	--
8	West San Fernando Valley	55	61	0	2(4%)	29.0
9	East San Gabriel Valley 1					
9	East San Gabriel Valley 2	61	65	0	9(15%)	32.9
10	Pomona/Walnut Valley	--	--	--	--	--
11	South San Gabriel Valley	--	--	--	--	--
12	South Central Los Angeles County	--	--	--	--	--
13	Santa Clarita Valley	--	--	--	--	--
ORANGE COUNTY						
16	North Orange County	--	--	--	--	--
17	Central Orange County	60	53	0	2(3%)	24.8
18	North Coastal Orange County	--	--	--	--	--
19	Saddleback Valley	61	48	0	0	19.2
RIVERSIDE COUNTY ⁰						
22	Norco/Corona	59	60	0	2(3%)	27.8
23	Metropolitan Riverside County 1	112	82	0	14(13%)	33.7
23	Metropolitan Riverside County 2	--	--	--	--	--
23	Mira Loma	59	79	0	25(42%)	41.1
24	Perris Valley	60	65	0	3(5%)	29.3
25	Lake Elsinore	--	--	--	--	--
29	Banning Airport	--	--	--	--	--
30	Coachella Valley 1**	59	51	0	1(2%)	19.5
30	Coachella Valley 2**	61 ^{f)}	42 ^{f)}	0 ^{f)}	0 ^{f)}	18.6 ^{f)}
SAN BERNARDINO COUNTY						
32	Northwest San Bernardino Valley	--	--	--	--	--
33	Southwest San Bernardino Valley	60	70	0	3(5%)	31.3
34	Central San Bernardino Valley 1	60	84	0	4(7%)	31.8
34	Central San Bernardino Valley 2	58	56	0	3(5%)	31.5
35	East San Bernardino Valley	58	71	0	2(3%)	25.5
37	Central San Bernardino Mountains	59	43	0	0	19.2
38	East San Bernardino Mountains	--	--	--	--	--
DISTRICT MAXIMUM		106	0	25	41.1	106
SOUTH COAST AIR BASIN		84 ^{g)}	0	35	41.1	84 ^{f)}

KEY:

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter of air AAM = Annual Arithmetic Mean -- = Pollutant not monitored ** Salton Sea Air Basin

^d

Federal Reference Method (FRM) PM₁₀ samples were collected every 6 days at all sites except for Station Numbers 4144 and 4157, where samples were collected every three days. PM₁₀ statistics listed above are for the FRM data only. Federal Equivalent Method (FEM) PM₁₀ continuous monitoring instruments were operated at some of the above locations. Max 24-hour average PM₁₀ concentrations at sites with FEM monitoring in 2011 was 152 $\mu\text{g}/\text{m}^3$, at Mira Loma

^e

Federal annual PM₁₀ standard (AAM $> 50 \mu\text{g}/\text{m}^3$) was revoked in 2006. State standard is annual average (AAM) $> 20 \mu\text{g}/\text{m}^3$

^f

High PM₁₀ and PM_{2.5} data samples occurred due to special events (i.e., high wind, firework activities, etc.) were excluded in accordance with the EPA Exceptional Event Regulation. Excluded PM₁₀ data: 396 and 265 $\mu\text{g}/\text{m}^3$ on July 3 and August 28, at Palm Springs (FEM); 344 and 375 $\mu\text{g}/\text{m}^3$ on July 3 and August 28, at Indio (FEM); 323 $\mu\text{g}/\text{m}^3$ on August 28, at Indio (FRM). Excluded PM_{2.5} data: 94.6 $\mu\text{g}/\text{m}^3$ on July 5, at Azusa.

TABLE 3-3 (Continued)
2011 Air Quality Data – South Coast Air Quality Management District

SUSPENDED PARTICULATE MATTER PM_{2.5} ^g						
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. $\mu\text{g}/\text{m}^3$, 24-hour	98 th Percentile Conc. in $\mu\text{g}/\text{m}^3$, 24-hr	No. (%) Samples Exceeding Federal Std $> 35 \mu\text{g}/\text{m}^3$, 24-hour	Annual Average AAM Conc. $\mu\text{g}/\text{m}^3$
LOS ANGELES COUNTY						
1	Central Los Angeles	59	53	0	1(2%)	29.0
2	Northwest Coastal Los Angeles County	--	--	--	--	--
3	Southwest Coastal Los Angeles County	59	41	0	0	21.6
4	South Coastal Los Angeles County 1	60	43	0	0	24.2
4	South Coastal Los Angeles County 2	60	50	0	0	28.7
4	South Coastal LA County 3	--	--	--	--	--
6	West San Fernando Valley	--	--	--	--	--
7	East San Fernando Valley	55	61	0	2(4%)	29.0
8	West San Gabriel Valley	--	--	--	--	--
9	East San Gabriel Valley 1	61	65	0	9(15%)	32.9
9	East San Gabriel Valley 2	--	--	--	--	--
10	Pomona/Walnut Valley	--	--	--	--	--
11	South San Gabriel Valley	--	--	--	--	--
12	South Central Los Angeles County	--	--	--	--	--
13	Santa Clarita Valley	58	45	0	0	20.7
ORANGE COUNTY						
16	North Orange County	--	--	--	--	--
17	Central Orange County	60	53	0	2(3%)	24.8
18	North Coastal Orange County	--	--	--	--	--
19	Saddleback Valley	61	48	0	0	19.2
RIVERSIDE COUNTY						
22	Norco/Corona	59	60	0	2(3%)	27.8
23	Metropolitan Riverside County 1	112	82	0	14(13%)	33.7
23	Metropolitan Riverside County 2	--	--	--	--	--
23	Mira Loma	59	79	0	25(42%)	41.1
24	Perris Valley	60	65	0	3(5%)	29.3
25	Lake Elsinore	--	--	--	--	--
29	Banning Airport	--	--	--	--	--
30	Coachella Valley 1**	59	51	0	1(2%)	19.5
30	Coachella Valley 2**	61 ^h	42 ^h	0 ^h	0 ^h	18.6 ^h
SAN BERNARDINO COUNTY						
32	Northwest San Bernardino Valley	--	--	--	--	--
33	Southwest San Bernardino Valley	60	70	0	3(5%)	31.3
34	Central San Bernardino Valley 1	60	84	0	4(7%)	31.8
34	Central San Bernardino Valley 2	58	56	0	3(5%)	31.5
35	East San Bernardino Valley	58	71	0	2(3%)	25.5
37	Central San Bernardino Mountains	59	43	0	0	19.2
38	East San Bernardino Mountains	--	--	--	--	--
DISTRICT MAXIMUM		106	0	25	41.1	106
SOUTH COAST AIR BASIN		84 ^h	0	35	41.1	84 ^h

KEY:

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter of air AAM = Annual Arithmetic Mean -- = Pollutant not monitored ** Salton Sea Air Basin

^g PM_{2.5} samples were collected every three days at all sites except for station numbers 069, 072, 077, 087, 3176, 4144 and 4165, where samples were taken daily, and station number 5818 where samples were taken every six days. Federal annual PM_{2.5} standard is annual average (AAM) $> 15.0 \mu\text{g}/\text{m}^3$. State standard is annual average (AAM) $> 12.0 \mu\text{g}/\text{m}^3$.

TABLE 3-3 (Continued)
2011 Air Quality Data – South Coast Air Quality Management District

TOTAL SUSPENDED PARTICULATES TSP				
Source Receptor Area No.	Location of Air Monitoring Station	No. Days of Data	Max. Conc. $\mu\text{g}/\text{m}^3$, 24-hour	Annual Average AAM Conc. $\mu\text{g}/\text{m}^3$
LOS ANGELES COUNTY				
1	Central Los Angeles	60	84	53.7
2	Northwest Coastal Los Angeles County	59	155	49.3
3	Southwest Coastal Los Angeles County	55	69	36.1
4	South Coastal Los Angeles County 1	61	91	44.0
4	South Coastal Los Angeles County 2	56	81	43.9
4	South Coastal LA County 3	--	--	--
6	West San Fernando Valley	--	--	--
7	East San Fernando Valley	--	--	--
8	West San Gabriel Valley	59	74	44.1
9	East San Gabriel Valley 1	57	154	72.5
9	East San Gabriel Valley 2	--	--	--
10	Pomona/Walnut Valley	--	--	--
11	South San Gabriel Valley	59	140	64.4
12	South Central Los Angeles County	57	112	52.8
13	Santa Clarita Valley	--	--	--
ORANGE COUNTY				
16	North Orange County	-	-	-
17	Central Orange County	-	-	-
18	North Coastal Orange County	-	-	-
19	Saddleback Valley	-	-	-
RIVERSIDE COUNTY				
22	Norco/Corona	--	--	--
23	Metropolitan Riverside County 1	60	107	62.7
23	Metropolitan Riverside County 2	59	83	43.8
23	Mira Loma	--	--	--
24	Perris Valley	--	--	--
25	Lake Elsinore	--	--	--
29	Banning Airport	--	--	--
30	Coachella Valley 1**	--	--	--
30	Coachella Valley 2**	--	--	--
SAN BERNARDINO COUNTY				
32	Northwest San Bernardino Valley	58	94	47.2
33	Southwest San Bernardino Valley	--	--	--
34	Central San Bernardino Valley 1	54	131	64.7
34	Central San Bernardino Valley 2	61	97	51.4
35	East San Bernardino Valley	--	--	--
37	Central San Bernardino Mountains	--	--	--
38	East San Bernardino Mountains	--	--	--
DISTRICT MAXIMUM			155	72.5
SOUTH COAST AIR BASIN			155	72.5

KEY:

 $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter of air

AAM = Annual Arithmetic Mean

-- = Pollutant not monitored

** Salton Sea Air Basin

TABLE 3-3 (Concluded)
2011 Air Quality Data – South Coast Air Quality Management District

		LEAD ^h			SULFATES (SOx) ⁱ	
Source Receptor Area No.	Location of Air Monitoring Station	Max. Monthly Average Conc. ^{m)} µg/m ³	Max. 3-Months Rolling Averages, µg/m3	Max. Quarterly Average Conc. ^{m)} µg/m ³	Max. Conc. µg/m ³ , 24-hour	No. (%) Samples Exceeding State Standard ≥ 25 µg/m ³ , 24-hour
	LOS ANGELES COUNTY					
1	Central Los Angeles	0.012	0.011	0.011	58	8.0
2	Northwest Coastal Los Angeles County	--	--	--	--	--
3	Southwest Coastal Los Angeles County	0.008	0.006	0.005	58	5.9
4	South Coastal Los Angeles County 1	0.010	0.007	0.007	59	6.1
4	South Coastal Los Angeles County 2	0.013	0.010	0.010	60	5.9
4	South Coastal LA County 3	--	--	--	--	--
6	West San Fernando Valley	--	--	--	--	--
7	East San Fernando Valley	--	--	--	54	7.4
8	West San Gabriel Valley	--	--	--	--	--
9	East San Gabriel Valley 1	--	--	--	60	6.6
9	East San Gabriel Valley 2	--	--	--	--	--
10	Pomona/Walnut Valley	--	--	--	--	--
11	South San Gabriel Valley	0.011	0.010	0.010	--	--
12	South Central Los Angeles County	0.014	0.011	0.010	--	--
13	Santa Clarita Valley	--	--	--	58	6.1
	ORANGE COUNTY					
16	North Orange County	--	--	--	--	--
17	Central Orange County	--	--	--	60	6.5
18	North Coastal Orange County	--	--	--	--	--
19	Saddleback Valley	--	--	--	61	4.8
	RIVERSIDE COUNTY					
22	Norco/Corona	--	--	--	56	5.1
23	Metropolitan Riverside County 1	0.007	0.007	0.007	178	5.3
23	Metropolitan Riverside County 2	0.007	0.006	0.006	--	--
23	Mira Loma	--	--	--	58	5.4
24	Perris Valley	--	--	--	58	4.4
25	Lake Elsinore	--	--	--	--	--
29	Banning Airport	--	--	--	--	--
30	Coachella Valley 1**	--	--	--	59	4.4
30	Coachella Valley 2**	--	--	--	61	4.4
	SAN BERNARDINO COUNTY					
32	Northwest San Bernardino Valley	0.009	0.008	0.007	--	--
33	Southwest San Bernardino Valley	--	--	--	116	5.5
34	Central San Bernardino Valley 1	--	--	--	59	6.0
34	Central San Bernardino Valley 2	0.008	0.007	0.007	59	5.5
35	East San Bernardino Valley	--	--	--	57	4.9
37	Central San Bernardino Mountains	--	--	--	57	4.0
38	East San Bernardino Mountains	--	--	--	--	--
DISTRICT MAXIMUM		0.014	0.011	0.011	8.0	
SOUTH COAST AIR BASIN		0.014	0.011	0.011	8.0	

KEY:

$\mu\text{g}/\text{m}^3$ = micrograms per cubic meter of air -- = Pollutant not monitored ** Salton Sea Air Basin

^h Federal lead standard is 3-months rolling average $> 0.15 \mu\text{g}/\text{m}^3$; and state standard is monthly average $\geq 1.5 \mu\text{g}/\text{m}^3$. No regular monitoring location exceeded lead standards. Standards exceeded at special monitoring sites immediately downwind of stationary lead sources. Maximum monthly and 3-month rolling averages at special monitoring sites were $0.52 \mu\text{g}/\text{m}^3$ and $0.45 \mu\text{g}/\text{m}^3$, respectively..

ⁱ State sulfate standard is 24-hour $\geq 25 \mu\text{g}/\text{m}^3$. There is no federal standard for sulfate.

Carbon Monoxide

CO is a colorless, odorless, relatively inert gas. It is a trace constituent in the unpolluted troposphere, and is produced by both natural processes and human activities. In remote areas far from human habitation, carbon monoxide occurs in the atmosphere at an average background concentration of 0.04 ppm, primarily as a result of natural processes such as forest fires and the oxidation of methane. Global atmospheric mixing of CO from urban and industrial sources creates higher background concentrations (up to 0.20 ppm) near urban areas. The major source of CO in urban areas is incomplete combustion of carbon-containing fuels, mainly gasoline. According to the 2007 AQMP, in 2002, the inventory baseline year, approximately 98 percent of the CO emitted into the Basin's atmosphere was from mobile sources. Consequently, CO concentrations are generally highest in the vicinity of major concentrations of vehicular traffic.

CO is a primary pollutant, meaning that it is directly emitted into the air, not formed in the atmosphere by chemical reaction of precursors, as is the case with ozone and other secondary pollutants. Ambient concentrations of CO in the Basin exhibit large spatial and temporal variations due to variations in the rate at which CO is emitted and in the meteorological conditions that govern transport and dilution. Unlike ozone, CO tends to reach high concentrations in the fall and winter months. The highest concentrations frequently occur on weekdays at times consistent with rush hour traffic and late night during the coolest, most stable portion of the day.

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of worsening oxygen supply to the heart.

Inhaled CO has no direct toxic effect on the lungs, but exerts its effect on tissues by interfering with oxygen transport by competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.

Reductions in birth weight and impaired neurobehavioral development have been observed in animals chronically exposed to CO resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels. These include pre-term births and heart abnormalities.

Carbon monoxide concentrations were measured at 26 locations in the Basin and neighboring SSAB areas in 2011. Carbon monoxide concentrations did not exceed the standards in 2010. The highest one-hour average carbon monoxide concentration recorded (6.0 ppm in the South Central Los Angeles County area) was 17 percent of the federal one-hour carbon monoxide standard of 35 ppm. The highest eight-hour average carbon monoxide concentration recorded (4.7 ppm in the South Central Los Angeles County area) was 52 percent of the federal eight-hour carbon monoxide standard of 9.0 ppm. The state one-hour standard is also 9.0 ppm. The highest eight-hour average carbon monoxide concentration is 23.5 percent of the state eight-hour carbon monoxide standard of 20 ppm.

The 2003 AQMP revisions to the SCAQMD's CO Plan served two purposes: it replaced the 1997 attainment demonstration that lapsed at the end of 2000; and it provided the basis for a CO maintenance plan in the future. In 2004, the SCAQMD formally requested the U.S. EPA to re-designate the Basin from non-attainment to attainment with the CO National Ambient Air Quality Standards. On February 24, 2007, U.S. EPA published in the Federal Register its proposed decision to re-designate the Basin from non-attainment to attainment for CO. The comment period on the re-designation proposal closed on March 16, 2007 with no comments received by the U.S. EPA. On May 11, 2007, U.S. EPA published in the Federal Register its final decision to approve the SCAQMD's request for re-designation from non-attainment to attainment for CO, effective June 11, 2007.

Ozone

Ozone (O₃), a colorless gas with a sharp odor, is a highly reactive form of oxygen. High ozone concentrations exist naturally in the stratosphere. Some mixing of stratospheric ozone downward through the troposphere to the earth's surface does occur; however, the extent of ozone transport is limited. At the earth's surface in sites remote from urban areas ozone concentrations are normally very low (e.g., from 0.03 ppm to 0.05 ppm).

While ozone is beneficial in the stratosphere because it filters out skin-cancer-causing ultraviolet radiation, it is a highly reactive oxidant. It is this reactivity which accounts for its damaging effects on materials, plants, and human health at the earth's surface.

The propensity of ozone for reacting with organic materials causes it to be damaging to living cells and ambient ozone concentrations in the Basin are frequently sufficient to cause health effects. Ozone enters the human body primarily through the respiratory tract and causes respiratory irritation and discomfort, makes breathing more difficult during exercise, and reduces the respiratory system's ability to remove inhaled particles and fight infection.

Individuals exercising outdoors, children and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible subgroups for ozone effects. Short-term exposures (lasting for a few hours) to ozone at levels typically observed in southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in high ozone communities. Elevated ozone levels are also associated with increased school absences.

Ozone exposure under exercising conditions is known to increase the severity of the abovementioned observed responses. Animal studies suggest that exposures to a combination of pollutants which include ozone may be more toxic than exposure to ozone alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.

In 2011, the SCAQMD regularly monitored ozone concentrations at 31 locations in the Basin and SSAB. Maximum ozone concentrations for all areas monitored were below the stage 1 episode level (0.20 ppm) and below the health advisory level (0.15 ppm). Maximum ozone concentrations in the SSAB areas monitored by the SCAQMD were lower than in the Basin and were below the health advisory level.

In 2011, the maximum ozone concentrations in the Basin continued to exceed federal standards by wide margins. Maximum one-hour and eight-hour average ozone concentrations were 0.160 ppm and 0.136 ppm, respectively (the maximum one-hour and eight-hour concentrations were recorded in the Central San Bernardino Mountains area). The federal one-hour ozone standard was revoked and replaced by the eight-hour average ozone standard effective June 15, 2005. U.S. EPA has revised the federal eight-hour ozone standard from 0.84 ppm to 0.075 ppm, effective May 27, 2008. The maximum eight-hour concentration was 181 percent of the new federal standard. The maximum one-hour concentration was 178 percent of the one-hour state ozone standard of 0.09 ppm. The maximum eight-hour concentration was 194 percent of the eight-hour state ozone standard of 0.070 ppm.

The objective of the 2012 AQMP is to attain and maintain ambient air quality standards. Based upon the modeling analysis described in the Program Environmental Impact Report for the 2007 AQMP, implementation of all control measures contained in the 2012 AQMP is anticipated to bring the district into compliance with the federal eight-hour ozone standard by 2023 and the state eight-hour ozone standard beyond 2023.

Nitrogen Dioxide

NO₂ is a reddish-brown gas with a bleach-like odor. Nitric oxide (NO) is a colorless gas, formed from the nitrogen (N₂) and oxygen (O₂) in air under conditions of high temperature and pressure which are generally present during combustion of fuels; NO reacts rapidly with the oxygen in air to form NO₂. NO₂ is responsible for the brownish tinge of polluted air. The two gases, NO and NO₂, are referred to collectively as NO_x. In the presence of sunlight, NO₂ reacts to form nitric oxide and an oxygen atom. The oxygen atom can react further to form ozone, via a complex series of chemical reactions involving hydrocarbons. Nitrogen dioxide may also react to form nitric acid (HNO₃) which reacts further to form nitrates, components of PM_{2.5} and PM₁₀.

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposures to NO₂ at levels found in homes with gas stoves, which are higher than ambient levels found in southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO₂ in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma and/or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. More recent studies have found associations between NO₂ exposures and cardiopulmonary mortality, decreased lung function, respiratory symptoms and emergency room asthma visits.

In animals, exposure to levels of NO₂ considerably higher than ambient concentrations results in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of ozone exposure increases when animals are exposed to a combination of ozone and NO₂.

In 2011, nitrogen dioxide concentrations were monitored at 26 locations. No area of the Basin or SSAB exceeded the federal or state standards for nitrogen dioxide. The Basin has not exceeded the federal standard for nitrogen dioxide (0.0534 ppm) since 1991, when the Los Angeles County portion of the Basin recorded the last exceedance of the standard in any county within the United States.

In 2011, the maximum annual average concentration was 24.6 ppb recorded in the Pomona/Walnut Valley area. Effective March 20, 2008, CARB revised the nitrogen dioxide one-hour standard from 0.25 ppm to 0.18 ppm and established a new annual standard of 0.30 ppm. In addition, U.S. EPA has established a new federal one-hour NO₂ standard of 100 ppb (98th percentile concentration), effective April 7, 2010. The highest one-hour average concentration recorded (109.6 ppb in Central Los Angeles) was 61 percent of the state one-hour standard and the highest annual average concentration recorded was 8.2 percent of the state annual average standard. NO_x emission reductions continue to be necessary because it is a precursor to both ozone and PM (PM_{2.5} and PM₁₀) concentrations.

Sulfur Dioxide

SO₂ is a colorless gas with a sharp odor. It reacts in the air to form sulfuric acid (H₂SO₄), which contributes to acid precipitation, and sulfates, which are components of PM₁₀ and PM_{2.5}. Most of the SO₂ emitted into the atmosphere is produced by burning sulfur-containing fuels.

Exposure of a few minutes to low levels of SO₂ can result in airway constriction in some asthmatics. All asthmatics are sensitive to the effects of SO₂. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, is observed after acute higher exposure to SO₂. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO₂.

Animal studies suggest that despite SO₂ being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO₂ levels. In these studies, efforts to separate the effects of SO₂ from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.

No exceedances of federal or state standards for sulfur dioxide occurred in 2011 at any of the seven district locations monitored. The maximum one-hour sulfur dioxide concentration was 51.3 ppb, as recorded in the Metropolitan Riverside County 1 area. The maximum 24-hour sulfur dioxide concentration was 11.6 ppb, as recorded in South Coastal Los Angeles County 3

area. The U.S. EPA revised the federal sulfur dioxide standard by establishing a new one-hour standard of 0.075 ppm and revoking the existing annual arithmetic mean (0.03 ppm) and the 24-hour average (0.14 ppm), effective August 2, 2010. The state standards are 0.25 ppm for the one-hour average and 0.04 ppm for the 24-hour average. Though sulfur dioxide concentrations remain well below the standards, sulfur dioxide is a precursor to sulfate, which is a component of fine particulate matter, PM10, and PM2.5. Historical measurements showed concentrations to be well below standards and monitoring has been discontinued.

Particulate Matter (PM10 and PM2.5)

Of great concern to public health are the particles small enough to be inhaled into the deepest parts of the lung. Respirable particles (particulate matter less than about 10 micrometers in diameter) can accumulate in the respiratory system and aggravate health problems such as asthma, bronchitis and other lung diseases. Children, the elderly, exercising adults, and those suffering from asthma are especially vulnerable to adverse health effects of PM10 and PM2.5.

A consistent correlation between elevated ambient fine particulate matter (PM10 and PM2.5) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. Studies have reported an association between long-term exposure to air pollution dominated by fine particles (PM2.5) and increased mortality, reduction in life-span, and an increased mortality from lung cancer.

Daily fluctuations in fine particulate matter concentration levels have also been related to hospital admissions for acute respiratory conditions, to school and kindergarten absences, to a decrease in respiratory function in normal children and to increased medication use in children and adults with asthma. Studies have also shown lung function growth in children is reduced with long-term exposure to particulate matter. In addition to children, the elderly, and people with pre-existing respiratory and/or cardiovascular disease appear to be more susceptible to the effects of PM10 and PM2.5.

The SCAQMD monitored PM10 concentrations at 21 locations in 2011. The federal 24-hour PM10 standard (150 $\mu\text{g}/\text{m}^3$) was not exceeded at any of the locations monitored in 2010. The maximum 24-hour PM10 concentration of 106 $\mu\text{g}/\text{m}^3$ was recorded in the Coachella Valley No. 2 area and was 71 percent of the federal standard and 212 percent of the much more stringent state 24-hour PM10 standard (50 $\mu\text{g}/\text{m}^3$). The state 24-hour PM10 standard was exceeded at 14 of the 21 monitoring stations. The maximum annual average PM10 concentration of 41.3 $\mu\text{g}/\text{m}^3$ was recorded in Mira Loma. The maximum annual average PM10 concentration in Mira Loma was 207 percent of the state standard of 20 $\mu\text{g}/\text{m}^3$. The federal annual PM10 standard has been revoked.

In 2011, PM2.5 concentrations were monitored at 20 locations throughout the district. U.S. EPA revised the federal 24-hour PM2.5 standard from 65 $\mu\text{g}/\text{m}^3$ to 35 $\mu\text{g}/\text{m}^3$, effective December 17, 2006. In 2011, the maximum PM2.5 concentrations in the Basin exceeded the new federal 24-hour PM2.5 standard in all but five locations. The maximum 24-hour PM2.5 concentration of 65 $\mu\text{g}/\text{m}^3$ was recorded in the Central San Bernardino Valley 2 area, which represents 186 percent of the federal standard of 35 $\mu\text{g}/\text{m}^3$. The maximum annual average concentration of 15.3 $\mu\text{g}/\text{m}^3$

was recorded in Mira Loma, which represents 102 percent of the federal standard of 15 $\mu\text{g}/\text{m}^3$ and 128 percent of the state standard of 12 $\mu\text{g}/\text{m}^3$.

Similar to PM₁₀ concentrations, PM_{2.5} concentrations were higher in the inland valley areas of San Bernardino and Metropolitan Riverside counties. However, PM_{2.5} concentrations were also high in Central Los Angeles County and East San Gabriel Valley. The high PM_{2.5} concentrations in Los Angeles County are mainly due to the secondary formation of smaller particulates resulting from mobile and stationary source activities. In contrast to PM₁₀, PM_{2.5} concentrations were low in the Coachella Valley area of SSAB. PM₁₀ concentrations are normally higher in the desert areas due to windblown and fugitive dust emissions.

Lead

Lead in the atmosphere is present as a mixture of a number of lead compounds. Leaded gasoline and lead smelters have been the main sources of lead emitted into the air. Due to the phasing out of leaded gasoline, there was a dramatic reduction in atmospheric lead in the Basin over the past three decades.

Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

Lead poisoning can cause anemia, lethargy, seizures, and death. It appears that there are no direct effects of lead on the respiratory system. Lead can be stored in the bone from early-age environmental exposure, and elevated blood lead levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland), and osteoporosis (breakdown of bone tissue). Fetuses and breast-fed babies can be exposed to higher levels of lead because of previous environmental lead exposure of their mothers.

The old federal and current state standards for lead were not exceeded in any area of the district in 2011. There have been no violations of these standards at the SCAQMD's regular air monitoring stations since 1982, as a result of removal of lead from gasoline. The maximum quarterly average lead concentration (0.011 $\mu\text{g}/\text{m}^3$ at monitoring stations in Central Los Angeles) was 0.7 percent of the old federal quarterly average lead standard (1.5 $\mu\text{g}/\text{m}^3$). The maximum monthly average lead concentration (0.014 $\mu\text{g}/\text{m}^3$ in South Central Los Angeles County), measured at special monitoring sites immediately adjacent to stationary sources of lead was 0.9 percent of the state monthly average lead standard. No lead data were obtained at SSAB and Orange County stations in 2011. Because historical lead data showed concentrations in SSAB and Orange County areas to be well below the standard, measurements have been discontinued.

On November 12, 2008, U.S. EPA published new national ambient air quality standards for lead, which became effective January 12, 2010. The existing national lead standard, 1.5 $\mu\text{g}/\text{m}^3$, was reduced to 0.15 $\mu\text{g}/\text{m}^3$, averaged over a rolling three-month period. The new federal standard

was not exceeded at any source/receptor location in 2011. Nevertheless, U.S. EPA designated the Los Angeles County portion of the Basin as non-attainment for the new lead standard, effective December 31, 2010, primarily based on emissions from two battery recycling facilities. In response to the new federal lead standard, the SCAQMD adopted Rule 1420.1 – Emissions Standard for Lead from Large Lead-Acid Battery Recycling Facilities, in November 2010, to ensure that lead emissions do not exceed the new federal standard. Further, in May 2012, the SCAQMD adopted the 2012 Lead SIP to address the revision to the federal lead standard, which outlines the strategy and pollution control activities to demonstrate attainment of the federal lead standard before December 31, 2015.

Sulfates

Sulfates (SO_x) are chemical compounds which contain the sulfate ion and are part of the mixture of solid materials which make up PM₁₀. Most of the sulfates in the atmosphere are produced by oxidation of SO₂. Oxidation of sulfur dioxide yields sulfur trioxide (SO₃) which reacts with water to form sulfuric acid, which contributes to acid deposition. The reaction of sulfuric acid with basic substances such as ammonia yields sulfates, a component of PM₁₀ and PM_{2.5}.

Most of the health effects associated with fine particles and SO₂ at ambient levels are also associated with SO_x. Thus, both mortality and morbidity effects have been observed with an increase in ambient SO_x concentrations. However, efforts to separate the effects of SO_x from the effects of other pollutants have generally not been successful.

Clinical studies of asthmatics exposed to sulfuric acid suggest that adolescent asthmatics are possibly a subgroup susceptible to acid aerosol exposure. Animal studies suggest that acidic particles such as sulfuric acid aerosol and ammonium bisulfate are more toxic than non-acidic particles like ammonium sulfate. Whether the effects are attributable to acidity or to particles remains unresolved.

In 2011, the state 24-hour sulfate standard (25 µg/m³) was not exceeded in any of the monitoring locations in the district. There are no federal sulfate standards.

Vinyl Chloride

Vinyl chloride is a colorless, flammable gas at ambient temperature and pressure. It is also highly toxic and is classified by the American Conference of Governmental Industrial Hygienists (ACGIH) as A1 (confirmed carcinogen in humans) and by the International Agency for Research on Cancer (IARC) as 1 (known to be a human carcinogen)(Air Gas, 2010). At room temperature, vinyl chloride is a gas with a sickly sweet odor that is easily condensed. However, it is stored as a liquid. Due to the hazardous nature of vinyl chloride to human health there are no end products that use vinyl chloride in its monomer form. Vinyl chloride is a chemical intermediate, not a final product. It is an important industrial chemical chiefly used to produce polymer polyvinyl chloride (PVC). The process involves vinyl chloride liquid fed to polymerization reactors where it is converted from a monomer to a polymer PVC. The final product of the polymerization process is PVC in either a flake or pellet form. Billions of pounds of PVC are sold on the global market each year. From its flake or pellet form, PVC is sold to companies that heat and mold the PVC into end products such as PVC pipe and bottles.

In the past, vinyl chloride emissions have been associated primarily with sources such as landfills. Risks from exposure to vinyl chloride are considered to be a localized impacts rather than regional impacts. Because landfills in the district are subject to SCAQMD 1150.1, which contains stringent requirements for landfill gas collection and control, potential vinyl chloride emissions are below the level of detection. Therefore, the SCAQMD does not monitor for vinyl chloride at its monitoring stations.

Volatile Organic Compounds

It should be noted that there are no state or national ambient air quality standards for VOCs because they are not classified as criteria pollutants. VOCs are regulated, however, because limiting VOC emissions reduces the rate of photochemical reactions that contribute to the formation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, contributing to higher PM10 and lower visibility levels.

Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations of VOCs because of interference with oxygen uptake. In general, ambient VOC concentrations in the atmosphere are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis, even at low concentrations. Some hydrocarbon components classified as VOC emissions are thought or known to be hazardous. Benzene, for example, one hydrocarbon component of VOC emissions, is known to be a human carcinogen.

Visibility

In 2005, annual average visibility at Rudiboux (Riverside), the worst case, was just over 10 miles. With the exception of Lake County, which is designated in attainment, all of the air districts in California are currently designated as unclassified with respect to the CAAQS for visibility reducing particles.

In Class-I wilderness areas, which typically have visual range measured in tens of miles the deciview metric is used to estimate an individual's perception of visibility. The deciview index works inversely to visual range which is measured in miles or kilometers whereby a lower deciview is optimal. In the South Coast Air Basin, the Class-I areas are typically restricted to higher elevations (greater than 6,000 feet above sea level) or far downwind of the metropolitan emission source areas. Visibility in these areas is typically unrestricted due to regional haze despite being in close proximity to the urban setting. The 2005 baseline deciview mapping of the Basin is presented in Figure 3-1. All of the Class-I wilderness areas reside in areas having average deciview values less than 20 with many portions of those areas having average deciview values less than 10. By contrast, Rubidoux, in the Basin has a deciview value exceeding 30.

Federal Regional Haze Rule

The federal Regional Haze Rule, established by the U.S. EPA pursuant to CAA section 169A, establishes the national goal to prevent future and remedy existing impairment of visibility in federal Class I areas (such as federal wilderness areas and national parks). U.S. EPA's visibility regulations (40 CFR 51.300 through 51.309), require states to develop measures necessary to make reasonable progress towards remedying visibility impairment in these federal Class I areas. Section 169A and these regulations also require Best Available Retrofit Technology for certain

large stationary sources that were put in place between 1962 and 1977. See Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations, 70 Fed. Reg. 39104 (July 6, 2005).

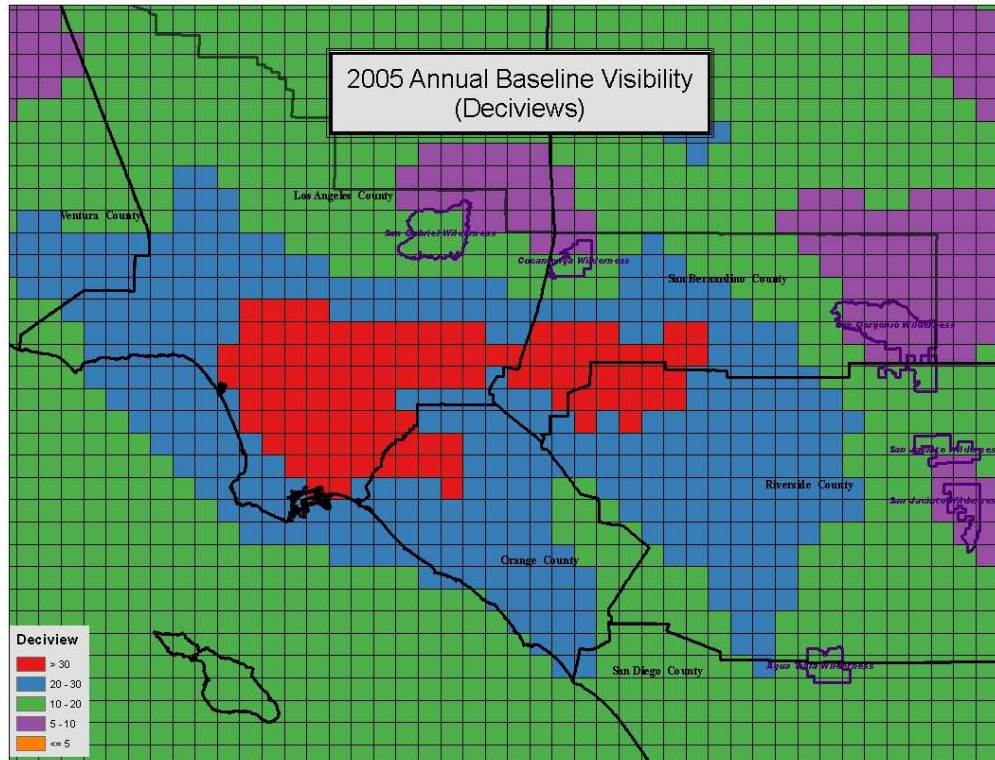


FIGURE 3-1
2005 Annual Baseline Visibility

California Visibility Standard

Since deterioration of visibility is one of the most obvious manifestations of air pollution and plays a major role in the public's perception of air quality, the state of California has adopted a standard for visibility or visual range. Until 1989, the standard was based on visibility estimates made by human observers. The standard was changed to require measurement of visual range using instruments that measure light scattering and absorption by suspended particles.

The visibility standard is based on the distance that atmospheric conditions allow a person to see at a given time and location. Visibility reduction from air pollution is often due to the presence of sulfur and nitrogen oxides, as well as particulate matter. Visibility degradation occurs when visibility reducing particles are produced in sufficient amounts such that the extinction coefficient is greater than 0.23 inverse kilometers (to reduce the visual range to less than 10 miles) at relative humidity less than 70 percent, 8-hour average (from 10:00 a.m. to 6:00 p.m.) according to the state standard. Future-year visibility in the Basin is projected empirically using the results derived from a regression analysis of visibility with air quality measurements. The regression data set consisted of aerosol composition data collected during a special monitoring program conducted concurrently with visibility data collection (prevailing visibility observations

from airports and visibility measurements from district monitoring stations). A full description of the visibility analysis is given in Appendix V of the 2012 AQMP.

With future year reductions of PM_{2.5} from implementation of all proposed emission controls for 2015, the annual average visibility would improve from 10 miles (calculated for 2008) to over 20 miles at Rubidoux, for example. Visual range in 2021 at all other Basin sites is expected to equal or exceed the Rubidoux visual range. Visual range is expected to double from the 2008 baseline due to reductions of secondary PM_{2.5}, directly emitted PM_{2.5} (including diesel soot) and lower nitrogen dioxide concentrations as a result of 2007 AQMP controls.

To meet Federal Regional Haze Rule requirements, CARB adopted the California Regional Haze Plan on January 22, 2009, addressing California’s visibility goals through 2018. As stated in Table 3-2 above, California’s statewide standard (applicable outside of the Lake Tahoe area) for Visibility Reducing Particles is an extinction coefficient of 0.23 per kilometer over an 8-hour averaging period. This translates to visibility of ten miles or more due to particles when relative humidity is less than 70 percent.

Non-Criteria Pollutants

Although the SCAQMD’s primary mandate is attaining the State and National Ambient Air Quality Standards for criteria pollutants within the district, SCAQMD also has a general responsibility pursuant to Health and Safety Code (HSC) §41700 to control emissions of air contaminants and prevent endangerment to public health. Additionally, state law requires the SCAQMD to implement airborne toxic control measures (ATCM) adopted by CARB, and to implement the Air Toxics “Hot Spots” Act. As a result, the SCAQMD has regulated pollutants other than criteria pollutants such as TACs, greenhouse gases and stratospheric ozone depleting compounds (ODCs). The SCAQMD has developed a number of rules to control non-criteria pollutants from both new and existing sources. These rules originated through state directives, CAA requirements, or the SCAQMD rulemaking process.

In addition to promulgating non-criteria pollutant rules, the SCAQMD has been evaluating AQMP control measures as well as existing rules to determine whether or not they would affect, either positively or negatively, emissions of non-criteria pollutants. For example, rules in which VOC components of coating materials are replaced by a non-photochemically reactive chlorinated substance would reduce the impacts resulting from ozone formation, but could increase emissions of toxic compounds or other substances that may have adverse impacts on human health.

The following subsections summarize the existing setting for the two major categories of non-criteria pollutants: compounds that contribute to TACs global climate change, and stratospheric ozone depletion.

Air Quality – Toxic Air Contaminants

Federal

Under Section 112 of the CAA, U.S. EPA is required to regulate sources that emit one or more of the 187 federally listed hazardous air pollutants (HAPs). HAPs are air toxic pollutants

identified in the CAA, which are known or suspected of causing cancer or other serious health effects. The federal HAPs are listed on the U.S. EPA website at <http://www.epa.gov/ttn/atw/orig189.html>. In order to implement the CAA, approximately 100 National Emission Standards for Hazardous Air Pollutants (NESHAPs) have been promulgated by U.S. EPA for major sources (sources emitting greater than 10 tons per year of a single HAP or greater than 25 tons per year of multiple HAPs). The SCAQMD can either directly implement NESHAPs or adopt rules that contain requirements at least as stringent as the NESHAP requirements. However, since NESHAPs often apply to sources in the district that are controlled, many of the sources that would have been subject to federal requirements already comply or are exempt.

In addition to the major source NESHAPs, U.S. EPA has also controlled HAPs from urban areas by developing Area Source NESHAPs under their Urban Air Toxics Strategy. U.S. EPA defines an area source as a source that emits less than 10 tons annually of any single hazardous air pollutant or less than 25 tons annually of a combination of hazardous air pollutants. The CAA requires the U.S. EPA to identify a list of at least 30 air toxics that pose the greatest potential health threat in urban areas. U.S. EPA is further required to identify and establish a list of area source categories that represent 90 percent of the emissions of the 30 urban air toxics associated with area sources, for which Area Source NESHAPs are to be developed under the CAA. U.S. EPA has identified a total of 70 area source categories with regulations promulgated for more than 30 categories so far. Appendix A lists key NESHAPs recently adopted or amended by U.S. EPA.

The federal toxics program recognizes diesel engine exhaust as a health hazard, however, diesel particulate matter itself is not one of their listed toxic air contaminants. Rather, each toxic compound in the speciated list of compounds in exhaust is considered separately. Although there are no specific NESHAP regulations for diesel PM, diesel particulate emission reductions are realized through federal regulations including diesel fuel standards and emission standards for stationary, marine, and locomotive engines; and idling controls for locomotives.

State

The California air toxics program was based on the CAA and the original federal list of hazardous air pollutants. The state program was established in 1983 under the Toxic Air Contaminant Identification and Control Act, Assembly Bill (AB) 1807, Tanner. Under the state program, toxic air contaminants are identified through a two-step process of risk identification and risk management. This two-step process was designed to protect residents from the health effects of toxic substances in the air.

Control of TACs under the TAC Identification and Control Program

California's TAC identification and control program, adopted in 1983 as AB 1807, is a two-step program in which substances are identified as TACs, and ATCMs are adopted to control emissions from specific sources. CARB has adopted a regulation designating all 188 federal hazardous air pollutants (HAPs) as TACs.

ATCMs are developed by CARB and implemented by the SCAQMD and other air districts through the adoption of regulations of equal or greater stringency. Generally, the ATCMs reduce

emissions to achieve exposure levels below a determined health threshold. If no such threshold levels are determined, emissions are reduced to the lowest level achievable through the best available control technology unless it is determined that an alternative level of emission reduction is adequate to protect public health.

Under California law, a federal NESHAP automatically becomes a state ATCM, unless CARB has already adopted an ATCM for the source category. Once a NESHAP becomes an ATCM, CARB and each air pollution control or air quality management district have certain responsibilities related to adoption or implementation and enforcement of the NESHAP/ATCM.

Control of TACs under the Air Toxics "Hot Spots" Act

The Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588) establishes a state-wide program to inventory and assess the risks from facilities that emit TACs and to notify the public about significant health risks associated with the emissions. Facilities are phased into the AB 2588 program based on their emissions of criteria pollutants or their occurrence on lists of toxic emitters compiled by the SCAQMD. Phase I consists of facilities that emit over 25 tons per year of any criteria pollutant and facilities present on the SCAQMD's toxics list. Phase I facilities entered the program by reporting their air TAC emissions for calendar year 1989. Phase II consists of facilities that emit between 10 and 25 tons per year of any criteria pollutant, and submitted air toxic inventory reports for calendar year 1990 emissions. Phase III consists of certain designated types of facilities which emit less than 10 tons per year of any criteria pollutant, and submitted inventory reports for calendar year 1991 emissions. Inventory reports are required to be updated every four years under the state law.

Air Toxics Control Measures

As part of its risk management efforts, CARB has passed state ATCMs to address air toxics from mobile and stationary sources. Some key ATCMs for stationary sources include reductions of benzene emissions from service stations, hexavalent chromium emissions from chrome plating, perchloroethylene emissions from dry cleaning, ethylene oxide emissions from sterilizers, and multiple air toxics from the automotive painting and repair industries.

Many of CARB's recent ATCMs are part of the CARB Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (DRRP), which was adopted in September 2000 (<http://www.arb.ca.gov/diesel/documents/rrpapp.htm>) with the goal of reducing diesel particulate matter emissions from compression ignition engines and associated health risk by 75 percent by 2010 and 85 percent by 2020. The DRRP includes strategies to reduce emissions from new and existing engines through the use of ultra-low sulfur diesel fuel, add-on controls, and engine replacement. In addition to stationary source engines, the plan addresses diesel PM emissions from mobile sources such as trucks, buses, construction equipment, locomotives, and ships. Appendix A lists key ATCMs recently adopted or amended by CARB.

SCAQMD

SCAQMD has regulated criteria air pollutants using either a technology-based or an emissions limit approach. The technology-based approach defines specific control technologies that may be installed to reduce pollutant emissions. The emission limit approach establishes an emission

limit, and allows industry to use any emission control equipment, as long as the emission requirements are met. The regulation of TACs often uses a health risk-based approach, but may also require a regulatory approach similar to criteria pollutants, as explained in the following subsections.

Rules and Regulations

Under the SCAQMD's toxic regulatory program there are 15 source-specific rules that target toxic emission reductions from over 10,000 sources such as metal finishing, spraying operations, dry cleaners, film cleaning, gasoline dispensing, and diesel-fueled stationary engines to name a few. In addition, other rules targeting criteria pollutant emission reductions also may also produce co-benefits of reducing air toxic emissions. For example, Rule 461, which regulates VOC emissions from gasoline dispensing, may also reduce benzene emissions, a component of gasoline, while Rule 1124, which regulates VOC emissions from aerospace component and manufacturing operations, may also reduce air toxic emissions such as perchloroethylene, trichloroethylene, and methylene chloride emissions contained in solvents and coatings used in aerospace operations.

New and modified sources of toxic air contaminants in the district are subject to Rule 1401 - New Source Review of Toxic Air Contaminants. In addition, Rule 212 – Standards for Approving Permits, requires notification of the SCAQMD's intent to grant a permit to construct a significant project, a new or modified permit unit posing an maximum individual cancer risk of one in one million (1×10^{-6}) or greater, or a new or modified facility with criteria pollutant emissions exceeding specified daily maximums. Distribution of notice is required to all addresses within a 1/4-mile radius, or other area deemed appropriate by the SCAQMD. Rule 1401 currently controls emissions of carcinogenic and non-carcinogenic (health effects other than cancer) air contaminants from new, modified and relocated sources by specifying limits on cancer risk and hazard index (explained further in the following discussion), respectively. The rule lists nearly 300 TACs that are evaluated during the SCAQMD's permitting process for new, modified or relocated sources. During the past decade, more than 80 compounds have been added or had risk values amended. The addition of diesel particulate matter from diesel-fueled internal combustion engines as a TAC in March 2008 was the most significant of recent amendments to the rule. Rule 1401.1 sets risk thresholds for new and relocated facilities near schools. The requirements are more stringent than those for other air toxics rules in order to provide additional protection to school children.

Air Toxics Control Plan

In March 2000, the SCAQMD Governing Board approved the Air Toxics Control Plan (ATCP) which was the first comprehensive plan in the nation to guide future toxic rulemaking and programs. The ATCP was developed to lay out the SCAQMD's air toxics control program which built upon existing federal, state, and local toxic control programs as well as co-benefits from implementation of State Implementation Plan (SIP) measures. The concept for the plan was an outgrowth of the Environmental Justice principles and the Environmental Justice Initiatives adopted by the SCAQMD Governing Board in October 1997. Monitoring studies and air toxics regulations that were created from these initiatives emphasized the need for a more systematic approach to reducing toxic air contaminants. The intent of the plan was to reduce exposure to air toxics in an equitable and cost-effective manner that promotes clean, healthful air

in the district. The plan proposed control strategies to reduce toxic air contaminants in the district implemented between years 2000 and 2010 through cooperative efforts of the SCAQMD, local governments, CARB and U.S. EPA.

2003 Cumulative Impact Reduction Strategies

The SCAQMD Governing Board approved a cumulative impacts reduction strategy in September 2003. The resulting 25 cumulative impacts strategies were a key element of the 2004 Addendum to the ATCP. The strategies included rules, policies, funding, education, and cooperation with other agencies. Some of the key SCAQMD accomplishments related to the cumulative impacts reduction strategies were:

- Rule 1401.1 which set more stringent health risk requirements for new and relocated facilities near schools
- Rule 1470 which established diesel PM emission limits and other requirements for diesel-fueled engines
- Rule 1469.1 which regulated chrome spraying operations
- Rule 410 which addresses odors from transfer stations and material recovery facilities
- Intergovernmental Review comment letters for CEQA documents
- SCAQMD's land use guidance document
- Additional protection in toxics rules for sensitive receptors, such as more stringent requirements for chrome plating operations and diesel engines located near schools

Addendum to the ATCP

The Addendum to the ATCP (Addendum) was adopted by the SCAQMD Governing Board in 2004 and served as a status report regarding implementation of the various mobile and stationary source strategies in the 2000 ATCP and introduced new measures to further address air toxics. The main elements of the Addendum were to address the progress made in implementation of the 2000 ATCP control strategies provide a historical perspective of air toxic emissions and current air toxic levels; incorporate the Cumulative Impact Reduction Strategies approved by the SCAQMD Governing Board in 2003 and additional measures identified in the 2003 AQMP; project future air toxic levels to the extent feasible; and summarize future efforts to develop the next ATCP. Significant progress had been made in implementing most of the SCAQMD strategies from the 2000 ATCP and the 2004 Addendum. CARB has also made notable progress in mobile source measures via its Diesel Risk Reduction Plan, especially for goods movement related sources, while the U.S. EPA continued to implement their air toxic programs applicable to stationary sources

Clean Communities Plan

On November 5, 2010, the SCAQMD Governing Board approved the 2010 Clean Communities Plan (CCP). The CCP was an update to the 2000 Air Toxics Control Plan (ATCP) and the 2004 Addendum. The objective of the 2010 CCP is to reduce the exposure to air toxics and air-related nuisances throughout the district, with emphasis on cumulative impacts. The elements of the 2010 CCP are community exposure reduction, community participation, communication and outreach, agency coordination, monitoring and compliance, source-specific programs, and nuisance. The centerpiece of the 2010 CCP is a pilot study through which the SCAQMD staff will work with community stakeholders to identify and develop solutions community-specific to

air quality issues in two communities: (1) the City of San Bernardino; and, (2) Boyle Heights and surrounding areas.

Control of TACs under the Air Toxics "Hot Spots" Act

In October 1992, the SCAQMD Governing Board adopted public notification procedures for Phase I and II facilities. These procedures specify that AB 2588 facilities must provide public notice when exceeding the following risk levels:

- Maximum Individual Cancer Risk: greater than 10 in one million (10×10^{-6})
- Total Hazard Index: greater than 1.0 for TACs except lead, or > 0.5 for lead

Public notice is to be provided by letters mailed to all addresses and all parents of children attending school in the impacted area. In addition, facilities must hold a public meeting and provide copies of the facility risk assessment in all school libraries and a public library in the impacted area.

The AB2588 Toxics “Hot Spots” Program is implemented through Rule 1402. The SCAQMD continues to review health risk assessments submitted. Notification is required from facilities with a significant risk under the AB 2588 program based on their initial approved health risk assessments and will continue on an ongoing basis as additional and subsequent health risk assessments are reviewed and approved.

There are currently about 600 facilities in the SCAQMD’s AB2588 program. Since 1992 when the state Health and Safety Code incorporated a risk reduction requirement in the program, the SCAQMD has reviewed and approved over 300 HRAs, 44 facilities were required to do a public notice, and 21 facilities were subject to risk reduction. Currently, over 96 percent of the facilities in the program have cancer risks below ten in a million and over 98 percent have acute and chronic hazard indices of less than one.

Multiple Air Toxics Exposure Studies

Multiple Air Toxics Exposure Study (MATES)

In 1986, SCAQMD conducted the first MATES Study to determine the Basin-wide risks associated with major airborne carcinogens. At the time, the state of technology was such that only twenty known air toxic compounds could be analyzed and diesel exhaust particulate did not have an agency accepted carcinogenic health risk value. Toxic air contaminants are determined by the U.S. EPA, and by the Cal/EPA, including the Office of Environmental Health Hazard Assessment and the ARB. For purposes of MATES, the California carcinogenic health risk factors were used. The maximum combined individual health risk for simultaneous exposure to pollutants under the study was estimated to be 600 to 5,000 in one million.

Multiple Air Toxics Exposure Study II (MATES II)

At its October 10, 1997 meeting, the SCAQMD Governing Board directed staff to conduct a follow up to the MATES study to quantify the magnitude of population exposure risk from existing sources of selected air toxic contaminants at that time. The follow up study, MATES II, included a monitoring program of 40 known air toxic compounds, an updated emissions inventory of toxic air contaminants (including microinventories around each of the 14 microscale

sites), and a modeling effort to characterize health risks from hazardous air pollutants. The estimated basin-wide carcinogenic health risk from ambient measurements was 1,400 per million people. About 70 percent of the basin wide health risk was attributed to diesel particulate emissions; about 20 percent to other toxics associated with mobile sources (including benzene, butadiene, and formaldehyde); about 10 percent of basin wide health risk was attributed to stationary sources (which include industrial sources and other certain specifically identified commercial businesses such as dry cleaners and print shops.)

Multiple Air Toxics Exposure Study III (MATES III)

MATES III was a follow up to previous air toxics studies in the Basin and was part of the SCAQMD Governing Board's 2003-04 Environmental Justice Workplan. The MATES III Study consists of several elements including a monitoring program, an updated emissions inventory of toxic air contaminants, and a modeling effort to characterize carcinogenic health risk across the Basin. Besides toxics, additional measurements include organic carbon, elemental carbon, and total carbon, as well as, Particulate Matter (PM), including PM_{2.5}. It did not estimate mortality or other health effects from particulate exposures. MATES III revealed a general downward trend in air toxic pollutant concentrations with an estimated basin-wide lifetime carcinogenic health risk of 1,200 in one million. Mobile sources accounted for 94 percent of the basin-wide lifetime carcinogenic health risk with diesel exhaust particulate contributing to 84 percent of the mobile source basin-wide lifetime carcinogenic health risk. Non-diesel carcinogenic health risk was reduced declined by 50 percent from the MATES II values.

Health Effects

Carcinogenic Health Risks from Toxic Air Contaminants

One of the primary health risks of concern due to exposure to TACs is the risk of contracting cancer. The carcinogenic potential of TACs is a particular public health concern because it is currently believed by many scientists that there is no "safe" level of exposure to carcinogens. Any exposure to a carcinogen poses some risk of causing cancer. It is currently estimated that about one in four deaths in the United States is attributable to cancer. About two percent of cancer deaths in the United States may be attributable to environmental pollution (Doll and Peto 1981). The proportion of cancer deaths attributable to air pollution has not been estimated using epidemiological methods.

Non-Cancer Health Risks from Toxic Air Contaminants

Unlike carcinogens, for most TAC non-carcinogens it is believed that there is a threshold level of exposure to the compound below which it will not pose a health risk. Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) develops Reference Exposure Levels (RELs) for TACs which are health-conservative estimates of the levels of exposure at or below which health effects are not expected. The non-cancer health risk due to exposure to a TAC is assessed by comparing the estimated level of exposure to the REL. The comparison is expressed as the ratio of the estimated exposure level to the REL, called the hazard index (HI).

Climate Change

Global climate change is a change in the average weather of the earth, which can be measured by wind patterns, storms, precipitation, and temperature. Historical records have shown that

temperature changes have occurred in the past, such as during previous ice ages. Data indicate that the current temperature record differs from previous climate changes in rate and magnitude.

Gases that trap heat in the atmosphere are often called greenhouse gases (GHGs), comparable to a greenhouse, which captures and traps radiant energy. GHGs are emitted by natural processes and human activities. The accumulation of greenhouse gases in the atmosphere regulates the earth's temperature. Global warming is the observed increase in average temperature of the earth's surface and atmosphere. The primary cause of global warming is an increase of GHGs in the atmosphere. The six major GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), and perfluorocarbon (PFCs). The GHGs absorb longwave radiant energy emitted by the Earth, which warms the atmosphere. The GHGs also emit longwave radiation both upward to space and back down toward the surface of the Earth. The downward part of this longwave radiation emitted by the atmosphere is known as the "greenhouse effect." Emissions from human activities such as fossil fuel combustion for electricity production and vehicles have elevated the concentration of these gases in the atmosphere.

CO₂ is an odorless, colorless greenhouse gas. Natural sources include the following: decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic (human caused) sources of CO₂ are from burning coal, oil, natural gas, and wood.

CH₄ is a flammable gas and is the main component of natural gas. N₂O, also known as laughing gas, is a colorless greenhouse gas. Some industrial processes such as fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions also contribute to the atmospheric load of N₂O. HFCs are synthetic man-made chemicals that are used as a substitute for chlorofluorocarbons (whose production was stopped as required by the Montreal Protocol) for automobile air conditioners and refrigerants. The two main sources of PFCs are primary aluminum production and semiconductor manufacture. SF₆ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. SF₆ is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Scientific consensus, as reflected in recent reports issued by the United Nations Intergovernmental Panel on Climate Change, is that the majority of the observed warming over the last 50 years can be attributable to increased concentration of GHGs in the atmosphere due to human activities. Industrial activities, particularly increased consumption of fossil fuels (e.g., gasoline, diesel, wood, coal, etc.), have heavily contributed to the increase in atmospheric levels of GHGs. The United Nations Intergovernmental Panel on Climate Change constructed several emission trajectories of greenhouse gases needed to stabilize global temperatures and climate change impacts. It concluded that a stabilization of greenhouse gases at 400 to 450 ppm carbon dioxide-equivalent concentration is required to keep global mean warming below two degrees Celsius, which is assumed to be necessary to avoid dangerous impacts from climate change.

The potential health effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme events, air quality impacts, and sea level rise. There may be

direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems (e.g., heat rash and heat stroke). In addition, climate sensitive diseases may increase, such as those spread by mosquitoes and other disease carrying insects. Those diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding, hurricanes, and wildfires can displace people and agriculture, which would have negative consequences. Drought in some areas may increase, which would decrease water and food availability. Global warming may also contribute to air quality problems from increased frequency of smog and particulate air pollution.

The impacts of climate change will also affect projects in various ways. Effects of climate change are rising sea levels and changes in snow pack. The extent of climate change impacts at specific locations remains unclear. It is expected that Federal, State and local agencies will more precisely quantify impacts in various regions. As an example, it is expected that the California Department of Water Resources will formalize a list of foreseeable water quality issues associated with various degrees of climate change. Once state government agencies make these lists available, they could be used to more precisely determine to what extent a project creates global climate change impacts.

Federal

Greenhouse Gas Endangerment Findings

On December 7, 2009, the U.S. EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the CAA. It was concluded in the Endangerment Finding that CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆ taken in combination endanger both the public health and the public welfare of current and future generations. The Cause or Contribute Finding stated that the combined emissions from motor vehicles and motor vehicle engines contribute to the greenhouse gas air pollution that endangers public health and welfare. These findings were a prerequisite for implementing GHG standards for vehicles. The U.S. EPA and the National Highway Traffic Safety Administration (NHTSA) finalized emission standards for light-duty vehicles in May 2010 and for heavy-duty vehicles in August of 2011.

Renewable Fuel Standard

The RFS program was established under the Energy Policy Act (EPA) of 2005, which required 7.5 billion gallons of renewable-fuel to be blended into gasoline by 2012. Under the Energy Independence and Security Act (EISA) of 2007, the RFS program was expanded to include diesel, required the volume of renewable fuel blended into transportation fuel be increased from nine billion gallons in 2008 to 36 billion gallons by 2022, established new categories of renewable fuel and required U.S. EPA to apply lifecycle GHG performance threshold standards so that each category of renewable fuel emits fewer greenhouse gases than the petroleum fuel it replaces. The RFS is expected to reduce greenhouse gas emissions by 138 million metric tons, about the annual emissions of 27 million passenger vehicles, replacing about seven percent of expected annual diesel consumption and decreasing oil imports by \$41.5 billion.

GHG Tailoring Rule

On May 13, 2010, U.S. EPA finalized the Tailoring Rule to phase in the applicability of the PSD and Title V operating permit programs for GHGs. The rule was tailored to include the largest GHG emitters, while excluding smaller sources (restaurants, commercial facilities and small farms). The first step (January 2, 2011 to June 30, 2011) addressed the largest sources that contributed 65 percent of the stationary GHG sources. Title V GHG requirements were triggered only when affected facility owners/operators were applying, renewing or revising their permits for non-GHG pollutants. PSD GHG requirements were applicable only if sources were undergoing permitting actions for other non-GHG pollutants and the permitted action would increase GHG emission by 75,000 metric tons of CO₂e per year or more.

The second step (July 1, 2011 to June 30, 2013), included sources that emit or have the potential to emit 100,000 of CO₂e metric tons per year or more. Newly constructed sources that are not major sources for non-GHG pollutants would not be subject to PSD GHG requirements unless it emits 100,000 tons of CO₂e per year or more. Modifications to a major source would not be subject to PSD GHG requirements unless it generates a net increase of 75,000 tons of CO₂e per year or more. Sources not subject to Title V would not be subject to Title V GHG requirements unless 100,000 tons of CO₂e per year or more would be emitted.

The third step of the Tailoring Rule was finalized on July 12, 2012. The third step determined not to lower the current PSD and Title V applicability thresholds for GHG-emitting sources established in the Tailoring Rule for Steps 1 and 2. The rule also promulgates regulatory revisions for better implementation of the federal program for establishing plantwide applicability limitations (PALs) for GHG emissions, which will improve the administration of the GHG PSD permitting programs.

GHG Reporting Program

U.S. EPA issued the Mandatory Reporting of Greenhouse Gases Rule (40 CFR Part 98) under the 2008 Consolidated Appropriations Act. The Mandatory Reporting of Greenhouse Gases Rule requires reporting of GHG data from large sources and suppliers under the Greenhouse Gas Reporting Program (GHGRP). Suppliers of certain products that would result in GHG emissions if released, combusted or oxidized; direct emitting source categories; and facilities that inject CO₂ underground for geologic sequestration or any purpose other than geologic sequestration are included. Facilities that emit 25,000 metric tons or more per year of GHGs in CO₂ equivalents (CO₂e) are required to submit annual reports to U.S. EPA. For the 2010 calendar, there were 6,260 entities that reported GHG data under this program, and 467 of the entities reporting were from California. Of the 3,200 million metric tons of CO₂e that were reported nationally, 112 million metric tons were from California. Power plants were the largest stationary source of direct U.S. GHG emissions with 2,326 million metric tons of CO₂e, followed by refineries with 183 million metric tons of CO₂e. CO₂ emissions accounted for largest share of direct emissions with 95 percent, followed by methane with four percent, and nitrous oxide and fluorinated gases representing the remaining one percent.

State*Executive Order S-3-05*

In June 2005, then Governor Schwarzenegger signed Executive Order S-3-05, which established emission reduction targets. The goals would reduce GHG emissions to 2000 levels by 2010, then to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

AB 32: Global Warming Solutions Act

On September 27, 2006, Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006, was enacted by the State of California and signed by Governor Schwarzenegger. AB 32 expanded on Executive Order #S-3-05. The legislature stated that “global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” AB 32 represents the first enforceable state-wide program in the United States to cap all GHG emissions from major industries that includes penalties for non-compliance. While acknowledging that national and international actions will be necessary to fully address the issue of global warming, AB 32 lays out a program to inventory and reduce greenhouse gas emissions in California and from power generation facilities located outside the state that serve California residents and businesses.

AB 32 requires CARB to:

- Establish a statewide GHG emissions cap for 2020, based on 1990 emissions by January 1, 2008;
- Adopt mandatory reporting rules for significant sources of GHG by January 1, 2008;
- Adopt an emissions reduction plan by January 1, 2009, indicating how emissions reductions will be achieved via regulations, market mechanisms, and other actions; and
- Adopt regulations to achieve the maximum technologically feasible and cost-effective reductions of GHG by January 1, 2011.

The combination of Executive Order #S-3-05 and AB 32 will require significant development and implementation of energy efficient technologies and shifting of energy production to renewable sources.

Consistent with the requirement to develop an emission reduction plan, CARB prepared a Scoping Plan indicating how GHG emission reductions will be achieved through regulations, market mechanisms, and other actions. The Scoping Plan was released for public review and comment in October 2008 and approved by CARB on December 11, 2008. The Scoping Plan calls for reducing greenhouse gas emissions to 1990 levels by 2020. This means cutting approximately 30 percent from business-as-usual (BAU) emission levels projected for 2020, or about 15 percent from today’s levels. Key elements of CARB staff’s recommendations for reducing California’s greenhouse gas emissions to 1990 levels by 2020 contained in the Scoping Plan include the following:

- Expansion and strengthening of existing energy efficiency programs and building and appliance standards;
- Expansion of the Renewables Portfolio Standard to 33 percent;
- Development of a California cap-and-trade program that links with other Western Climate Initiative (WCI) Partner programs to create a regional market system;

- Establishing targets for transportation-related greenhouse gases and pursuing policies and incentives to achieve those targets;
- Adoption and implementation of existing State laws and policies, including California’s clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Targeted fees, including a public good charge on water use, fees on high GWP gases and a fee to fund the state’s long-term commitment to AB 32 administration.

In response to the comments received on the Draft Scoping Plan and at the November 2008 public hearing, CARB made a few changes to the Draft Scoping Plan, primarily to:

- State that California “will transition to 100 percent auction” of allowances and expects to “auction significantly more [allowances] than the Western Climate Initiative minimum;”
- Make clear that allowance set-asides could be used to provide incentives for voluntary renewable power purchases by businesses and individuals and for increased energy efficiency;
- Make clear that allowance set-asides can be used to ensure that voluntary actions, such as renewable power purchases, can be used to reduce greenhouse gas emissions under the cap;
- Provide allowances are not required from carbon neutral projects; and
- Mandate that commercial recycling be implemented to replace virgin raw materials with recyclables.

In 2009, total California greenhouse gas emissions were 457 million metric tons of carbon dioxide equivalent (MMTCO₂e); net emissions were 453 MMTCO₂e, reflecting the influence of sinks (net CO₂ flux from forestry). While total emissions have increased by 5.5 percent from 1990 to 2009, emissions decreased by 5.8 percent from 2008 to 2009 (485 to 457 MMTCO₂e). The total net emissions between 2000 and 2009 decreased from 459 to 453 MMTCO₂e, representing a 1.3 percent decrease from 2000 and a 6.1 percent increase from the 1990 emissions level. The transportation sector accounted for approximately 38 percent of the total emissions, while the industrial sector accounted for approximately 20 percent. Emissions from electricity generation were about 23 percent with almost equal contributions from in-state and imported electricity.

Per capita emissions in California have slightly declined from 2000 to 2009 (by 9.7 percent), but the overall nine percent increase in population during the same period offsets the emission reductions. From a per capita sector perspective, industrial per capita emissions have declined 21 percent from 2000 to 2009, while per capita emissions for ODCs substitutes saw the highest increase (52 percent).

From a broader geographical perspective, the state of California ranked second in the United States for 2007 greenhouse gas emissions, only behind Texas. However, from a per capita standpoint, California had the 46th lowest GHG emissions. On a global scale, California had the 14th largest carbon dioxide emissions and the 19th largest per capita emissions. The GHG inventory is divided into three categories: stationary sources, on-road mobile sources, and off-road mobile sources.

AB 1493 Vehicular Emissions: Carbon Dioxide

Prior to the U.S. EPA and NHTSA joint rulemaking, the Governor signed Assembly Bill (AB) 1493 (2002). AB 1493 requires that CARB develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of greenhouse gases emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the state.”

CARB originally approved regulations to reduce GHGs from passenger vehicles in September 2004, with the regulations to take effect in 2009 (Amendments to CCR Title 13, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1)). California’s first request to the U.S. EPA to implement GHG standards for passenger vehicles was made in December 2005 and denied in March 2008. The U.S. EPA then granted California the authority to implement GHG emission reduction standards for new passenger cars, pickup trucks and sport utility vehicles on June 30, 2009.

On April 1, 2010, the CARB filed amended regulations for passenger vehicles as part of California’s commitment toward the National Program to reduce new passenger vehicle GHGs from 2012 through 2016. The amendments will prepare California to harmonize its rules with the federal Light-Duty Vehicle GHG Standards and CAFE Standards (discussed above).

Senate Bill 1368 (2006)

SB 1368 is the companion bill of AB 32 and was signed by Governor Schwarzenegger in September 2006. SB 1368 requires the California Public Utilities Commission (PUC) to establish a greenhouse gas emission performance standard for baseload generation from investor owned utilities by February 1, 2007. The California Energy Commission (CEC) must establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the greenhouse gas emission rate from a baseload combined-cycle natural gas fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the PUC and CEC.

Executive Order S-1-07 (2007)

Governor Schwarzenegger signed Executive Order S-1-07 in 2007 which finds that the transportation sector is the main source of GHG emissions in California. The executive order proclaims the transportation sector accounts for over 40 percent of statewide GHG emissions. The executive order also establishes a goal to reduce the carbon intensity of transportation fuels sold in California by a minimum of 10 percent by 2020.

In particular, the executive order established a Low-Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the CEC, the ARB, the University of California, and other agencies to develop and propose protocols for measuring the “life-cycle carbon intensity” of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by CEC on December 24, 2007) and was submitted to CARB for consideration as an “early action” item under AB 32. CARB adopted the LCFS on April 23, 2009.

Senate Bill 375 (2008)

SB 375, signed in September 2008, aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. As part of the alignment, SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a Sustainable Communities Strategy (SCS) or Alternative Planning Strategy (APS) which prescribes land use allocation in that MPO's Regional Transportation Plan (RTP). CARB, in consultation with MPOs, is required to provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every 4 years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned GHG emission reduction targets. If MPOs do not meet the GHG reduction targets, transportation projects located in the MPO boundaries would not be eligible for funding programmed after January 1, 2012.

CARB appointed the Regional Targets Advisory Committee (RTAC), as required under SB 375, on January 23, 2009. The RTAC's charge was to advise ARB on the factors to be considered and methodologies to be used for establishing regional targets. The RTAC provided its recommendation to CARB on September 29, 2009. CARB must adopt final targets by September 30, 2010.

Executive Order S-13-08 (2008)

Governor Schwarzenegger signed Executive Order S-13-08 on November 14, 2008 which directs California to develop methods for adapting to climate change through preparation of a statewide plan. The executive order directs OPR, in cooperation with the Resources Agency, to provide land use planning guidance related to sea level rise and other climate change impacts by May 30, 2009. The order also directs the Resources Agency to develop a state Climate Adaptation Strategy by June 30, 2009 and to convene an independent panel to complete the first California Sea Level Rise Assessment Report. The assessment report is required to be completed by December 1, 2010 and required to meet the following four criteria:

1. Project the relative sea level rise specific to California by taking into account issues such as coastal erosion rates, tidal impacts, El Niño and La Niña events, storm surge, and land subsidence rates;
2. Identify the range of uncertainty in selected sea level rise projections;
3. Synthesize existing information on projected sea level rise impacts to state infrastructure (e.g., roads, public facilities, beaches), natural areas, and coastal and marine ecosystems; and
4. Discuss future research needs relating to sea level rise in California.

Senate Bills 1078 and 107 and Executive Order S-14-08 (2008)

SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010. In November 2008, then Governor Schwarzenegger signed Executive Order S-14-08, which expands the state's Renewable Portfolio Standard to 33 percent renewable power by 2020.

SB X-1-2

SB X1-2 was signed by Governor Edmund G. Brown, Jr., in April 2011. SB X1-2 created a new Renewables Portfolio Standard (RPS), which preempted the CARB's 33 percent Renewable Electricity Standard. The new RPS applies to all electricity retailers in the state including publicly owned utilities (POUs), investor-owned utilities, electricity service providers, and community choice aggregators. These entities must adopt the new RPS goals of 20 percent of retail sales from renewables by the end of 2013, 25 percent by the end of 2016, and the 33 percent requirement by the end of 2020.

SCAQMD

The SCAQMD adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the AQMP. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include support of the adoption of a California greenhouse gas emission reduction goal.

Basin GHG Policy and Inventory

The SCAQMD has established a policy, adopted by the SCAQMD Governing Board at its September 5, 2008 meeting, to actively seek opportunities to reduce emissions of criteria, toxic, and climate change pollutants. The policy includes the intent to assist businesses and local governments implementing climate change measures, decrease the agency's carbon footprint, and provide climate change information to the public. The SCAQMD will take the following actions:

1. Work cooperatively with other agencies/entities to develop quantification protocols, rules, and programs related to greenhouse gases;
2. Share experiences and lessons learned relative to the Regional Clean Air Incentives Market (RECLAIM) to help inform state, multi-state, and federal development of effective, enforceable cap-and-trade programs. To the extent practicable, staff will actively engage in current and future regulatory development to ensure that early actions taken by local businesses to reduce greenhouse gases will be treated fairly and equitably. SCAQMD staff will seek to streamline administrative procedures to the extent feasible to facilitate the implementation of AB 32 measures;
3. Review and comment on proposed legislation related to climate change and greenhouse gases, pursuant to the 'Guiding Principles for SCAQMD Staff Comments on Legislation Relating to Climate Change' approved at the SCAQMD Governing Board's Special Meeting in April 2008;
4. Provide higher priority to funding Technology Advancement Office (TAO) projects or contracts that also reduce greenhouse gas emissions;
5. Develop recommendations through a public process for an interim greenhouse gas CEQA significance threshold, until such time that an applicable and appropriate statewide greenhouse gas significance level is established. Provide guidance on analyzing greenhouse gas emissions and identify mitigation measures. Continue to consider GHG impacts and mitigation in SCAQMD lead agency documents and in comments when SCAQMD is a responsible agency;
6. Revise the SCAQMD's Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning to include information on greenhouse gas strategies as

- a resource for local governments. The Guidance Document will be consistent with state guidance, including CARB's Scoping Plan;
7. Update the Basin's greenhouse gas inventory in conjunction with each Air Quality Management Plan. Information and data used will be determined in consultation with CARB, to ensure consistency with state programs. Staff will also assist local governments in developing greenhouse gas inventories;
 8. Bring recommendations to the SCAQMD Governing Board on how the agency can reduce its own carbon footprint, including drafting a Green Building Policy with recommendations regarding SCAQMD purchases, building maintenance, and other areas of products and services. Assess employee travel as well as other activities that are not part of a GHG inventory and determine what greenhouse gas emissions these activities represent, how they could be reduced, and what it would cost to offset the emissions;
 9. Provide educational materials concerning climate change and available actions to reduce greenhouse gas emissions on the SCAQMD website, in brochures, and other venues to help cities and counties, businesses, households, schools, and others learn about ways to reduce their electricity and water use through conservation or other efforts, improve energy efficiency, reduce vehicle miles traveled, access alternative mobility resources, utilize low emission vehicles and implement other climate friendly strategies; and
 10. Conduct conferences, or include topics in other conferences, as appropriate, related to various aspects of climate change, including understanding impacts, technology advancement, public education, and other emerging aspects of climate change science.

On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is lead agency. SCAQMD's recommended interim GHG significance threshold proposal uses a tiered approach to determining significance. Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA. Tier 2 consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. Tier 3 establishes a screening significance threshold level to determine significance using a 90 percent emission capture rate approach, which corresponds to 10,000 metric tons of CO₂ equivalent emissions per year (MTCO₂e/year). Tier 4, to be based on performance standards, is yet to be developed. Under Tier 5 the project proponent would allow offsets to reduce GHG emission impacts to less than the proposed screening level. If CARB adopts statewide significance thresholds, SCAQMD staff plans to report back to the SCAQMD Governing Board regarding any recommended changes or additions to the SCAQMD's interim threshold.

Table 3-4 presents the GHG emission inventory by major source categories in calendar year 2008, as identified in the 2012 AQMP, for Basin. The emissions reported herein are based on in-basin energy consumption and do not include out-of-basin energy production (e.g., power plants, crude oil production) or delivery emissions (e.g., natural gas pipeline loss). Three major GHG pollutants have been included: the CO₂, N₂O, and CH₄. These GHG emissions are reported in MMTCO₂e. Mobile sources generate 59.4 percent of the equipment, airport equipment, oil and gas drilling equipment. The remaining 40.6 percent of the total Basin GHG emissions are from stationary and area sources. The largest stationary/area source is fuel combustion, which is 27.8

percent of the total Basin GHG emissions (68.6 percent of the GHG emissions from the stationary and area source category).

Air Quality – Ozone Depletion

The Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol) is an international treaty designed to phase out halogenated hydrocarbons (chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs)), which are considered ODCs). The Montreal Protocol was first signed in September 16, 1987 and has been revised seven times. The United States ratified the original Montreal Protocol and each of its revisions.

Federal

Under Title VI of the CAA, U.S. EPA is responsible for programs that protect the stratospheric ozone layer. Title 40, Part 82 of the Code of Federal Regulations contains U.S. EPA's regulations to protect the ozone layer. U.S. EPA regulations phase out the production and import of ODCs consistent with the Montreal Protocol. ODCs are typically used as refrigerants or as foam blowing agents. ODCs are regulated as Class I or Class II controlled substances. Class I substances have a higher ozone-depleting potential and have been completely phased out in the U.S., except for exemptions allowed under the Montreal Protocol. Class II substances are hydrochlorofluorocarbons (HCFCs), which are transitional substitutes for many Class I substances and are being phased out.

State

AB 32: Global Warming Solutions Act

Some ODS exhibit high global warming potentials. As stated in Section 3.2.3.1, ARB developed a cap and trade regulation under AB 32. The cap and trade regulation includes the Compliance Offset Protocol Ozone Depleting Substances Projects, which provides methods to quantify and report GHG emission reductions associated with the destruction of high global warming potential ODCs sourced from and destroyed within the U.S. that would have otherwise been released to the atmosphere. The protocol must be used to quantify and report GHG reductions under the ARB's GHG Cap and Trade Regulation.

Refrigerant Management Program

As part AB 32, ARB adopted a regulation (Refrigerant Management Program) in 2009 to reduce GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal.

TABLE 3-4
2008 GHG Emissions for Basin

		Emission (TPD)			Emission (TPY)			MMTONS
CODE	Source Category	CO2	N2O	CH4	CO2	N2O	CH4	CO2e
Fuel Combustion								
10	Electric Utilities	34,303	.08	0.71	12,520,562	29.0	258	11.4
20	Cogeneration	872	.00	0.02	318,340	0.60	6.00	0.29
30	Oil and Gas Production (combustion)	2,908	.01	0.08	1,061,470	4.71	29.5	0.96
40	Petroleum Refining (Combustion)	44,654	.06	0.57	16,298,766	20.7	207	14.8
50	Manufacturing and Industrial	22,182	.06	0.48	8,096,396	20.9	174	7.35
52	Food and Agricultural Processing	927	00	0.02	338,516	0.84	7.16	0.31
60	Service and Commercial	21,889	0.08	0.59	7,989,416	30.8	215	7.26
99	Other (Fuel Combustion)	2,241	0.2	0.16	818,057	8.58	58	0.75
Total Fuel Combustion		129,977	0.32	2.62	47,441,523	116	956	43.1
Waste Disposal								
110	Sewage Treatment	26.4	0.00	0.00	9,653	0.12	1.50	0.01
120	Landfills	3,166	0.04	505	1,155,509	14.0	184,451	4.57
130	Incineration	580	0.00	0.02	211,708	0.81	5.48	0.19
199	Other (Waste Disposal)			2.25	0	0.00	820	0.02
Total Waste Disposal		3,772	0.04	508	1,376,870	14.9	185,278	4.78
Cleaning and Surface Coatings								
210	Laundering							
220	Degreasing							
230	Coatings and Related Processes	27.1	0.00	0.21	9,890	0.02	78.0	0.01
240	Printing			0.00	0	0.00	0.00	0.00
250	Adhesives and Sealants			0.00	0	0.00	0.00	0.00
299	Other (Cleaning and Surface Coatings)	2,621	0.00	0.12	956,739	1.20	43.9	0.87
Total Cleaning and Surface Coatings		2,648	0.00	0.33	966,628	1.22	122	0.88
Petroleum Production and Marketing								
310	Oil and Gas Production	92.1	0.00	0.92	33,605	0.06	336	0.04
320	Petroleum Refining	770	0.00	1.65	280,932	0.36	603	0.27
330	Petroleum Marketing			83.8	0	0.00	30,598	0.58
399	Other (Petroleum Production and Marketing)			0.00	0	0.00	0	0.00
Total Petroleum Production and Marketing		862	0.00	86.4	314,536	0.42	31,537	0.89

TABLE 3-4 (Continued)
2008 GHG Emissions for Basin

		Emission (TPD)			Emission (TPY)			MMTONS
CODE	Source Category	CO2	N2O	CH4	CO2	N2O	CH4	CO2e
Industrial Processes								
410	Chemical			0.92	0	0.00	337	0.01
420	Food and Agriculture			0.02	0	0.00	7.10	0.00
430	Mineral Processes	279	0.00	0.05	101,804	0.19	17.3	0.09
440	Metal Processes			0.02	0	0.00	9.10	0.00
450	Wood and Paper			0.00	0	0.00	0.00	0.00
460	Glass and Related Products			0.00	0	0.00	0.90	0.00
470	Electronics			0.00	0	0.00	0.00	0.00
499	Other (Industrial Processes)	0.08	0.00	0.47	28	0.00	172	0.00
Total Industrial Processes		279	0.00	1.49	101,832	0.19	543	0.10
Solvent Evaporation								
510	Consumer Products			0.00	0.00	0.00	0.00	0.00
520	Architectural Coatings and Related Solvent			0.00	0.00	0.00	0.00	0.00
530	Pesticides/Fertilizers			0.00	0.00	0.00	0.00	0.00
540	Asphalt Paving/Roofing			0.07	0.00	0.00	24.20	0.00
Total Solvent Evaporation		0.00	0.00	0.07	0.00	0.00	24.20	0.00
Miscellaneous Processes								
610	Residential Fuel Combustion	38,850	0.12	0.95	14,180,326	45.3	347	12.9
620	Farming Operations			25.6	0.00	0.00	9,354	0.18
630	Construction and Demolition			0.00	0.00	0.00	0	0.00
640	Paved Road Dust			0.00	0.00	0.00	0	0.00
645	Unpaved Road Dust			0.00	0.00	0.00	0	0.00
650	Fugitive Windblown Dust			0.00	0.00	0.00	0	0.00
660	Fires			0.08	0.00	0.00	30.9	0.00
670	Waste Burning and Disposal			0.58	0.00	0.00	212	0.00
680	Utility Equipment				0.00	0.00		0.00
690	Cooking			0.64	0.00	0.00	235	0.00
699	Other (Miscellaneous Processes)			0.00	0.00	0.00	0	0.00
Total Miscellaneous Processes		38,850	0.12	27.9	14,180,326	45.3	10,179	13.1

TABLE 3-4 (CONCLUDED)
2008 GHG Emissions for Basin

		Emission (TPD)			Emission (TPY)			MMT ONS
CODE	Source Category	CO2	N2O	CH4	CO2	N2O	CH4	CO2e
On-Road Motor Vehicles								
710	Light Duty Passenger Auto (LDA)	84,679	2.72	3.62	30,907,957	993	1,321	28.3
722	Light Duty Trucks 1 (T1 : up to 3750 lb.)	22,319	0.72	0.96	8,146,321	263	350	7.47
723	Light Duty Trucks 2 (T2 : 3751-5750 lb.)	33,495	1.08	1.43	12,225,619	392	523	11.2
724	Medium Duty Trucks (T3 : 5751-8500 lb.)	29,415	0.94	1.25	10,736,309	343	456	9.85
732	Light Heavy Duty Gas Trucks 1 (T4 : 8501-10000 lb.)	8,195	0.16	0.21	2,991,059	57.3	76.7	2.73
733	Light Heavy Duty Gas Trucks 2 (T5 : 10001-14000 lb.)	1,116	0.05	0.07	407,174	19.0	25.6	0.38
734	Medium Heavy Duty Gas Trucks (T6 : 14001-33000 lb.)	727	0.02	0.20	265,506	5.48	73.0	0.24
736	Heavy Heavy Duty Gas Trucks ((HHDGT > 33000 lb.)	102	0.01	0.01	37,198	2.19	2.56	0.03
742	Light Heavy Duty Diesel Trucks 1 (T4 : 8501-10000 lb.)	2,166	0.02	0.02	790,600	6.94	7.30	0.72
743	Light Heavy Duty Diesel Trucks 2 (T5 : 10001-14000 lb.)	735	0.01	0.01	268,413	2.56	2.92	0.24
744	Medium Heavy Duty Diesel Truck (T6 : 14001-33000 lb.)	5,422	0.02	0.02	1,978,974	8.40	8.76	1.80
746	Heavy Heavy Duty Diesel Trucks (HHDDT > 33000 lb.)	17,017	0.05	0.05	6,211,247	17.5	16.4	5.64
750	Motorcycles (MCY)	7,959	0.26	0.34	2,904,910	94.9	124	2.66
760	Diesel Urban Buses (UB)	2,135	0.00	0.00	779,389	1.46	1.46	0.71
762	Gas Urban Buses (UB)	166	0.02	0.02	60,654	8.40	6.94	0.06
770	School Buses (SB)	337	0.00	0.00	122,995	1.46	1.46	0.11
776	Other Buses (OB)	927	0.00	0.00	338,430	0.73	0.73	0.31
780	Motor Homes (MH)	568	0.03	0.04	207,431	11.0	14.6	0.19
Total On-Road Motor Vehicles		217,480	6.11	8.26	79,380,188	155	187	72.7
Other Mobile Sources								
810	Aircraft	37,455	0.10	0.09	13,670,930	36.5	31.8	12.4
820	Trains	586	0.00	0.00	213,835	0.45	1.38	0.19
830	Ships and Commercial Boats	3,452	0.01	0.02	1,259,927	2.64	8.13	1.14
	Other Off-road sources (construction equipment, airport equipment, oil and gas drilling equipment)	16,080	1.72	8.84	5,869,123	628	3,226	5.56
Total Other Mobile Sources		57,572	1.83	8.95	21,013,816	668	3,268	19.3
Total Stationary and Area Sources								
Total Stationary and Area Sources		176,388	0.49	626	64,381,716	178	228,639	63
Total On-Road Vehicles		217,480	6.11	8.26	79,380,188	155	187	73
Total Other Mobile*		57,572	1.83	8.95	21,013,816	668	3,268	19
Total 2008 Baseline GHG Emissions for Basin		451,440	8.42	644	164,775,719	1,001	232,094	155

HFC Emission Reduction Measures for Mobile Air Conditioning - Regulation for Small Containers of Automotive Refrigerant

The automotive refrigerant small containers regulation applies to the sale, use, and disposal of small containers of automotive refrigerant with a GWP greater than 150. Emission reductions are achieved through implementation of four requirements: 1) use of a self-sealing valve on the container, 2) improved labeling instructions, 3) a deposit and recycling program for small containers, and 4) an education program that emphasizes best practices for vehicle recharging. This regulation went into effect on January 1, 2010 with a one-year sell-through period for containers manufactured before January 1, 2010. The target recycle rate is initially set at 90 percent, and rose to 95 percent beginning January 1, 2012.

SCAQMD

The SCAQMD adopted a "Policy on Global Warming and Stratospheric Ozone Depletion" on April 6, 1990. The policy targeted a transition away from chlorofluorocarbons (CFCs) as an industrial refrigerant and propellant in aerosol cans. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives for ODSs:

- Phase out the use and corresponding emissions of chlorofluorocarbons (CFCs), methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of hydrochlorofluorocarbons (HCFCs) by the year 2000;
- Develop recycling regulations for HCFCs; and
- Develop an emissions inventory and control strategy for methyl bromide.

Rule 1122 – Solvent Degreasers

Rule 1112 applies to all persons who own or operate batch-loaded cold cleaners, open-top vapor degreasers, all types of conveyORIZED degreasers, and air-tight and airless cleaning systems that carry out solvent degreasing operations with a solvent containing Volatile Organic Compounds (VOCs) or with a NESHAP halogenated solvent. Some ODSs (carbon tetrachloride and 1,1,1-trichloroethane) are NESHAP halogenated solvents.

Rule 1171 – Solvent Cleaning Operations

Rule 1171 reduces emissions of volatile organic compounds (VOCs), toxic air contaminants, and stratospheric ozone-depleting or globalwarming compounds from the use, storage and disposal of solvent cleaning materials in solvent cleaning operations and activities

CHAPTER 4

ENVIRONMENTAL IMPACTS

Introduction

Potential Environmental Impacts and Mitigation Measures

Potential Environmental Impacts Found Not to Be Significant

Significant Irreversible Environmental Changes

Potential Growth-Inducing Impacts

Consistency

INTRODUCTION

The CEQA Guidelines require environmental documents to identify significant environmental effects that may result from a proposed project [CEQA Guidelines §15126.2(a)]. Direct and indirect significant effects of a project on the environment should be identified and described, with consideration given to both short- and long-term impacts. The discussion of environmental impacts may include, but is not limited to: the resources involved; physical changes; alterations of ecological systems; health and safety problems caused by physical changes; and, other aspects of the resource base, including water, scenic quality, and public services. If significant adverse environmental impacts are identified, the CEQA Guidelines require a discussion of measures that could either avoid or substantially reduce any adverse environmental impacts to the greatest extent feasible [CEQA Guidelines §15126.4].

The CEQA Guidelines indicate that the degree of specificity required in a CEQA document depends on the type of project being proposed [CEQA Guidelines §15146]. The detail of the environmental analysis for certain types of projects cannot be as great as for others. For example, the environmental document for projects, such as the adoption or amendment of a comprehensive zoning ordinance or a local general plan, should focus on the secondary effects that can be expected to follow from the adoption or amendment, but the analysis need not be as detailed as the analysis of the specific construction projects that might follow. As a result, this ~~Draft-Final~~ EA analyzes impacts on a regional level and impacts on the level of individual industries or individual facilities only where feasible.

The categories of environmental impacts to be studied in a CEQA document are established by CEQA [Public Resources Code, §21000 et seq.], and the CEQA Guidelines, as promulgated by the State of California Secretary of Resources. Under the CEQA Guidelines, there are approximately 17 environmental categories in which potential adverse impacts from a project are evaluated. Projects are evaluated against the environmental categories to determine those environmental categories that may be adversely affected by the proposed project are further analyzed in the appropriate CEQA document.

POTENTIAL ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Pursuant to CEQA, an Initial Study, including an environmental checklist, was prepared for this project (see Appendix C). Of the 17 potential environmental impact categories, one (air quality and GHG emissions) was identified as being potentially adversely affected by the proposed project for operational NOx emission reductions foregone. No comment letters were received on the Initial Study.

The topic of operational air quality emissions is further evaluated in detail in this ~~Draft-Final~~ EA. The environmental impact analysis for this environmental topic incorporates a “worst-case” approach. This approach entails the premise that whenever the analysis requires that assumptions be made, those assumptions that result in the greatest adverse impacts are typically chosen. This method ensures that all potential effects of the proposed project are documented for the decision-makers and the public. Accordingly, the following analyses use a conservative “worst-case” approach for analyzing the potentially significant adverse environmental impacts associated with the implementation of the proposed project.

Air Quality Greenhouse Gas Emission

The initial evaluation in the NOP/IS identified the topic of air quality and GHG emissions as potentially being adversely affected by the proposed project. Under this topic, the construction impacts for air quality and GHG emissions and operational GHG emissions were determined in the NOP/IS to be less than significant and, therefore, no further evaluation of this topic is required in this ~~Draft-Final~~ EA. No comments on the NOP/IS prepared for the proposed project were received that disputed this conclusion. Thus, only operational air quality emissions were identified in the NOP/IS as needing further analysis in this ~~Draft-Final~~ EA, specifically for NOx emission reductions foregone.

Significance Criteria

To determine whether air quality impacts from adopting and implementing the proposed project are significant, impacts will be evaluated and compared to the following criteria. If impacts exceed any of the significance thresholds in Table 4-1, they will be considered significant. All feasible mitigation measures will be identified and implemented to reduce significant impacts to the maximum extent feasible. The proposed project will be considered to have significant adverse air quality impacts if any one of the thresholds in Table 4-1 are equaled or exceeded.

The SCAQMD makes significance determinations for construction impacts based on the maximum or peak daily emissions during the construction period, which provides a “worst-case” analysis of the construction emissions. Similarly, significance determinations for operational emissions are based on the maximum or peak daily allowable emissions during the operational phase.

Project-Specific Air Quality Impacts During Operation

Equipment added to PAR 219 and/or PAR 222 and their operational air quality effects are presented in Table 4-2. Most of the equipment affected by the proposed project would be operated in the same fashion as under the existing permit system, which means they would be subject to any applicable rule requirements or permit conditions. Because this equipment would still be subject to applicable rule requirements or permit conditions, no operational air quality impacts are anticipated.

The proposed project, however, contains exceptions for the following types of equipment or operations that would exempt them from the emission control requirements of the currently applicable rules: piston-type internal combustion engines with a manufacturer’s rating of 100 brake horsepower or less that are used exclusively for electrical generation at remote two-way radio transmission towers, which are currently regulated by Rule 1110.2; and Rule 1147 equipment (affected power pressure washers, asphalt day tankers, tar pots, portable diesel-fueled heaters, and diesel-fueled boilers). Pursuant to the proposed project, equipment currently subject to Rules 1110.2 and 1147 would no longer be subject to their respective rule requirements resulting in emission increases or emission reductions foregone (Table 4-2).

Table 4-1
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds ^a		
Pollutant	Construction ^b	Operation ^c
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO2eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants ^d		
NO2 1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM10 24-hour average annual average	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation) 1.0 µg/m ³	
PM2.5 24-hour average	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation)	
SO2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99 th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 µg/m ³ (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day Average Rolling 3-month average Quarterly average	1.5 µg/m ³ (state) 0.15 µg/m ³ (federal) 1.5 µg/m ³ (federal)	

^a Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

^b Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

^c For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

^d Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

^e Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million $\mu\text{g}/\text{m}^3$ = microgram per cubic meter \geq = greater than or equal to
 MT/yr CO₂eq = metric tons per year of CO₂ equivalents $>$ = greater than

Table 4-2
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
<u>Asphalt day tankers with a maximum capacity greater than 159 gallons but no more than 5,000 gallons and equipped with a demister and a burner that fire exclusively on liquefied petroleum gas (LPG)</u>	Added to Table I	Added to (m)(23)	Rule 1147 (NOx)	NOx emission reductions foregone since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1) if placed in to PARs 219 and 222.
<u>Asphalt pavement heaters used for road maintenance and new road construction.</u>	Added to Table I	Removed from (a)(4) to (a)(5)	Rule 219 (a)(4)(NOx)	No emissions impact – equipment category moved from Rule 219 to PAR 222.
<u>Diesel-fueled boilers that have a rated maximum heat input capacity of no more than 2,000,000 Btu/hour or less fueled with diesel #2 fuel, and are located more than 4,000 feet above sea level or more than 15 miles offshore from the mainland and in operation prior to the date of adoption.</u>	Added to Table I	Added to (b)(2)	Rule 1147 (NOx)	NOx emission reductions foregone since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1) if placed in to PARs 219 and 222.
<u>Food ovens with a rated maximum heat input capacity of 2,000,000 Btu/hour or less, and are fired exclusively on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day.</u>	Added to Table I	Added to (b)(2)	Rule 1147 (NOx)	NOx emission reductions foregone since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1) if placed in to PARs 219 and 222.
<u>Fuel cells, which produce electricity in a electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies; and are equipped with a heater producing supplemental heat with a rated heat input capacity of 90,000 therms per year or less</u>	Added to Table I	Added to b(5)	Rule 1150.1 (landfill gas)	No emissions impact - these are closed units and there is no difference in emissions between permitted and unpermitted equipment.
<u>Micro-turbines, with a maximum rated heat input capacity of 3,500,000 British thermal units (Btu) per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation with the state of California or were in operation prior to date of amendment.</u>	Added to Table I	Added to b(1)	Rule 1150.1 (landfill gas)	No emissions impact - language requiring DG certification is equivalent to BACT.

Table 4-2 (Continued)
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
<u>Natural gas, propane and oil odorant storage, of less than 950 liters (251 gallons) capacity and associated transfer and control equipment used exclusively for such equipment.</u>	Added to Table I	Added to m(9)	Rule 219 (m)(9)	No emissions impact - Odorant tanks are exempted from written permit by Rule 219 (m)(9). PAR 219 would add language clarifying that natural gas, propane and oil odorant storage tanks are exempt from written permits under this provision.
<u>Portable diesel fueled heaters, with a rated maximum heat input capacity of no more than 250,000 Btu/hour or less and designed to be fired exclusively on diesel fuel only.</u>	Added to Table I	Added to b(4)	Rule 1147 (NOx)	NOx emissions since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1) if placed in to PARs 219 and 222.
<u>Power pressure washers and hot water or steam washers and cleaners that are equipped with a heater or burner that is designed to be fired exclusively on diesel fuel, has a maximum rated heat input capacity of 550,000 Btu/hour or less, is equipped with a non-resettable chronometer, and the maximum NOx emission output of the equipment is less than one pound per day and uses no more than 50 gallons of fuel per day.</u>	Added to Table I	Added to b(4)	Rule 1147 (NOx)	NOx emissions since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1)
<u>Tar pots or tar kettles with a maximum storage capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1000 gallons) and equipped with burner(s) that fire on liquefied petroleum gases.</u>	Added to Table I	Added to m(11)	Rule 1147 (NOx), Rule 471 (VOC)	NOx emission reductions foregone since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1) if placed in to PARs 219 and 222.
<u>Piston-type internal combustion engines used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius with a manufacturer's rating of 100 brake horsepower or less and are fired exclusively on diesel #2 fuel.</u>	Added to Table I	Added to (b)(1)	Rule 1110.2 (NOx)	NOx emission reductions foregone since these units would not need to comply with new or in-use requirements of Rule 1110.2 if placed in to PARs 219 and 222.

Table 4-2 (Continued)
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
Passive carbon adsorbers, with a maximum vessel capacity of no more than 120 gallons, using no without mechanical ventilation with a volume of 555 gallons or less, used exclusively for foul air odor control from at wastewater treatment plants or sanitary-sewer collection systems, including such as sanitary sewers lines, manholes and pump stations.	Not applicable	Added to (d)(10)	No source-specific requirements	There will not be any increase in emissions as there is currently no additional permit or control requirements for this equipment.
Crucible furnaces, pot furnaces, or induction furnaces with a capacity of 450 kilograms (992 pounds) or less each, where no sweating or distilling is conducted and where only the following materials are poured or held in a molten state and control equipment exclusively venting the equipment: Glass Ceramic materials, including glass and porcelain	Not applicable	Added to (e)(2)(G)	Currently treated as exempt	No emissions impact - this is a clarification
Welding equipment, oxygen gaseous fuel-cutting equipment and control equipment venting such equipment, <u>or laser etching/engraving of metal (excluding metal containing chromium, cadmium or lead).</u> This exemption does not include plasma arc-cutting equipment <u>or laser cutting equipment</u> that is used to cut stainless steel <u>or alloys containing chrome, nickel, or cadmium</u> , or laser cutters that <u>are rated 136 amperes or more more than 400 watts and control equipment venting such equipment.</u>	Not applicable	Added to (e)(8)	Currently treated as exempt	No emissions impact - this is a clarification that ensures no toxic materials are involved
Printing and related coating and/or laminating equipment and associated dryers and curing equipment, <u>as well as associated air pollution control equipment,</u> provided that such dryers and curing equipment are exempt pursuant to paragraph (b)(2), and that air pollution control equipment is <u>not required for source specific rule compliance,</u> provided that...	Not applicable	Added to (h)(1)	Currently treated as exempt	No emissions impact - this is a clarification that if a piece of air pollution control equipment is not required it does not need a permit

Table 4-2 (Continued)
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
Hand application of materials used in printing operations including but not limited to the use of squeegees, screens, stamps, stencils, and any hand tools, and <u>associated air pollution control equipment, unless air pollution control equipment is required for source specific rule compliance</u>	Not applicable	Added to (h)(7)	Currently treated as exempt under	No emissions impact - this is a clarification that if a piece of air pollution control equipment is not required it does not need a permit
Equipment used exclusively for tableting, or <u>packaging vitamins</u> , or coating vitamins, herbs, or dietary supplements provided that the facility equipment uses <u>waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter or uses less than one gallon per day or twenty-two (22) gallons per month of VOC containing solvents, and control equipment used exclusively to vent such equipment.</u>	Not applicable	Added to (i)(9)	Currently treated as exempt under	No emissions impact - this is a clarification that packaging vitamins is exempt and allows use of exempt waterborne solutions in this operation
Equipment used exclusively for tableting or packaging pharmaceuticals and cosmetics, or coating pharmaceutical tablets, provided that the facility equipment uses <u>waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter, or uses less than one gallon per day or twenty-two (22) gallons per month of VOC containing solvents; and control equipment used exclusively to vent such equipment.</u>	Not applicable	Added to (i)(10)	Currently treated as exempt under	No emissions impact - this is a clarification that allows use of exempt waterborne solutions in this operation; the use of waterborne solutions are currently exempt
Charbroilers for multi-family residential units if used by the owner or occupant of such dwelling for non-commercial purposes.	Not applicable	Added to (i)(12)	Currently treated as exempt	No emissions impact - this is a clarification that owner/occupants can barbeque at their residence
Batch mixers, which have a brimful capacity of 55 gallons or less (7.35 cubic feet) and control equipment exclusively venting the equipment <u>and associated filling equipment.</u>	Not applicable	Added to (k)(1)	Currently treated as exempt	No emissions impact - clarification - filling equipment does not produce any quantifiable emissions in this application

Table 4-2 (Continued)
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
Equipment used exclusively for mixing and blending of materials where no VOC containing solvents are used and no materials in powder form are added <u>and associated filling equipment</u>	Not applicable	Added to (k)(2)	Currently treated as exempt	No emissions impact - clarification - filling equipment does not produce any quantifiable emissions in this application
<u>Cosmetics filling stations where the filling equipment is hard piped to the cosmetics mixer or the holding tank feeding the filling equipment provided the mixer and holding tank is exempt under this rule</u>	Not applicable	Added to (k)(5)	Currently treated as exempt	No emissions impact - clarification - filling equipment does not produce any quantifiable emissions in this application
Equipment used exclusively for the packaging of sodium hypochlorite-based household cleaning or <u>sodium hypochlorite-based</u> pool products and control equipment <u>used exclusively vent the equipment</u>	Not applicable	Added to (k)(8)	Currently treated as exempt	No emissions impact - clarification on sodium hypochlorite
Coating or adhesive application or laminating equipment such as air, airless, air-assisted airless, high volume low pressure (HVLP), <u>air brushes and electrostatic spray equipment, and roller coaters, dip coaters, vacuum coaters, flow coaters and spray machines provided that</u>	Not applicable	Added to (l)(6)	Currently treated as exempt	No emissions impact - clarification that air brushes are also exempt
Equipment used exclusively for the storage and transfer of refined lubricating or <u>hydraulic oils and control equipment used exclusively to vent such equipment.</u>	Not applicable	Added to (m)(7)	Rule 463 (VOC)	No emissions impact - clarification - hydraulic oils are refined oils
Hand application of solvents for cleaning purposes including but not limited to use of rags, daubers, swabs, and squeeze bottles <u>as well as associated air pollution control equipment, unless air pollution control equipment is required for source specific rule compliance.</u>	Not applicable	Added to (o)(4)	Rule 1171 (VOC)	No emissions impact - this is a clarification that if a piece of air pollution control equipment is not required it does not need a permit
Paper shredding, <u>carpet and paper shearing and as well as</u> associated conveying systems, baling equipment, and control equipment venting such equipment.	Not applicable	Added to (p)(10)	Rule 404 (PM), Rule 405 (PM)	No emissions impact - carpet shearing does not produce quantifiable PM 2.5 or PM 10

Table 4-2 (Concluded)
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
<u>Equipment used to recycle aerosol paint cans by puncturing the can in an enclosed system which is vented through an activated carbon filter. This exemption shall only apply to aerosol recycling systems where the product within the aerosol can recycled was from aerosol cans used as part of their operation at the facility or facilities under common ownership</u>	Not applicable	Added to (p)(22)	Currently treated as exempt	No emissions impact - this is a closed system vented to carbon

For example, to comply with Rule 1110.2 requirements, the piston-type internal combustion engines used at remote two-way radio transmission towers would have been required to comply with Rule 1110.w requirements, which would have resulted in existing engines being replaced with engines that operate on propane or retrofitted with aftertreatment emission control technology. Similarly, to comply with Rule 1147 requirements, power pressure washers, asphalt day tankers, and asphalt tar pots would likely have been required to replace existing burners with low NO_x burners or replace equipment with equipment that is not fueled by diesel. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NO_x burners infeasible. Therefore, diesel fueled pressure washers, portable diesel heaters and diesel boilers would likely to have been replaced with alternative-fueled equipment (natural gas or propane). Rule 1147 was designed to be a retrofit not replacement rule; therefore, replacement of existing equipment was not intended by Rule 1147 requirements.

The CEQA documents for Rule 1110.2 analyzed potential impacts from operators of diesel-fueled engines switching to natural gas fueled equipment connected to natural gas pipes, which would have eliminated some diesel fuel delivery trips. Propane and liquefied natural gas (LNG) fueled equipment would have still required fuel delivery trips. Equipment retrofitted with aftertreatment may have required catalyst replacement trips, CEMS calibration trips, etc. However, it is not known what owner/operators would have done to comply with future requirements of Rule 1147 or Rule 1110.2, therefore, it is difficult to quantify differences in fuel consumed by the affected sources if they had complied with the emission reduction requirements of Rules 1147 or 1110.2, fuel or equipment delivery trips, or any additional inspection trips to monitor compliance with the applicable rule requirements. Since trips associated with these compliance activities are routine but infrequent, any changes in the number of vehicle trips on a daily basis between complying with Rule 1147 or Rule 1110.2 and continuing existing operations, as would be the case under the proposed project, would not likely be different compared to the baseline vehicle trips per day. Therefore, it would be speculative to estimate differences between vehicle trips during baseline operations and vehicle trips associated with rule compliance. Since any changes in the number of vehicle trips per day are considered to be speculative, this impact will not be considered further.

The net effect of adding equipment currently subject to Rules 1110.2 or 1147 to PARs 219 and 222 and exempting them from applicable rule emission reduction requirements is that there would be anticipated NO_x emission reductions forgone compared to the anticipated emission reductions identified in the CEQA documents for Rules 1147 and 1110.2. NO_x emission reductions foregone for each piece of either Rule 1147 or Rule 111.2 equipment are shown on Table 4-3 and detailed in Appendix B “Assumptions and Calculations.” As shown in Table 4-3, NO_x emission reductions foregone exceed the SCAQMD’s operational NO_x significance threshold (55 pounds per day) and, therefore, are concluded to be significant.

Project-Specific Mitigation for Air Quality Impacts During Operation: As concluded above, the air quality analysis for the proposed project indicates that NO_x emission reductions foregone during operation would exceed the applicable NO_x significance threshold (55 pounds per day) and were concluded to be significant. If significant adverse environmental impacts are identified in a CEQA document, the CEQA document shall describe feasible measures that could minimize the significant adverse impacts (CEQA Guidelines §15126.4).

Equipment currently subject to Rule 1147 that would be added to Rules 219 and 222 are small NO_x emitting equipment. ~~Retrofitting these this~~ retrofitting this equipment with low NO_x burners presents a

compliance challenge because of the lack of availability of low NOx burners for all types of equipment. The only other compliance option for these small pieces of equipment would be to replace the equipment with clean fuel equipment, which is costly. As already noted, the intent of Rule 1147 is a retrofit rule not an equipment replacement rule. Similarly, retrofitting the Rule 1110.2 equipment is costly and because the equipment is located in remote locations at high elevations, switching to natural gas is untenable because no natural gas pipelines extend to these locations and switching to other clean fuels is not possible because fuels would have to be trucked to the equipment, which may not be possible during winter inclement weather conditions. For these reasons, there are no feasible mitigation measures that would reduce or eliminate the expected NOx emission reductions foregone pursuant to the original rules' compliance schedules. Consequently, the operational air quality impacts from the proposed project cannot be mitigated to less than significant.

Table 4-3
Daily NOx Emission Reductions Foregone for PARs 219 and 222

Proposed New Rule 222 Equipment Categories And Par 219 Exemptions	Number of Existing Units	NOx Reductions Foregone^a (lb/day)
Pressure Washers	261	12
Asphalt Day Tankers	58 Why aren't all 72 included here? See comment p.5-8	10
Asphalt Tar Pots	147	37
Small Food Ovens	55	22
Portable Diesel Heaters	9	1.1
Diesel Boiler	5	0.7
Piston-type Internal Combustion Engines used at Two-way Radio Transmission Towers	16	56
Totals	553	139
Significance Criteria, lb/day		55
Significant?		Yes

a) Detailed calculations are included in Appendix B.

Remaining Air Quality Impacts During Operation: The air quality analysis concluded that operational air quality NOx emission reductions foregone of 139 pounds per day treated as NOx emissions would exceed the SCAQMD's NOx significance thresholds of 55 pounds per day and no feasible mitigation measures were identified that could reduce impacts to less than significant. As a result, Findings and a Statement of Overriding Considerations will be prepared for the Governing Board's consideration and approval prior to the public hearings for the proposed amendments.

Cumulative Air Quality Impacts During Operation:

The preceding project-specific analysis concluded that air quality impacts during operation would be significant from implementing the proposed project NOx emission reductions foregone would exceed the SCAQMD's NOx significance threshold for operation. Thus, the air quality

impacts during operation are considered to be cumulatively considerable pursuant to CEQA Guidelines §15064 (h)(1).

Even though the proposed project would result insignificant adverse project-specific NOx emission reductions foregone during operation, they are not expected to interfere with the air quality progress and attainment demonstration projected in the AQMP. The reason for this conclusion is that, overall, both Rules 1147 and 1110.2 are expected to result in net NOx emission reductions from affected equipment. Further, based on regional modeling analyses performed for the 2012 AQMP, implementing control measures contained in the 2012 AQMP, in addition to the air quality benefits of the existing rules with future compliance dates, is anticipated to bring the district into attainment with all national and most state ambient air quality standards by the year 2014 for the federal 24-hour PM_{2.5} standard and by the year 2023 for the federal eight-hour ozone standard. Therefore, cumulative operational air quality impacts from the proposed project, previous amendments and all other AQMP control measures considered together, are not expected to be significant because implementation of all AQMP control measures is expected to result in net emission reductions and overall air quality improvement. This determination is consistent with the conclusion in the 2012 AQMP Final Program EIR that cumulative air quality impacts from all AQMP control measures are not expected to be significant (SCAQMD, 2012). Therefore, there would be no significant adverse cumulative adverse operational air quality impacts from implementing the proposed project.

Cumulative Mitigation Measures During Operation: The analysis indicates that the proposed project would result a loss of NOx emission reductions during operation of the proposed project, but the loss would not result in adverse significant cumulative air quality impacts because previous amendments and all other AQMP control measures considered together. Thus, no cumulative mitigation measures for operation are required.

POTENTIAL ENVIRONMENTAL IMPACTS FOUND NOT TO BE SIGNIFICANT

While all the environmental topics required to be analyzed under CEQA were reviewed in the NOP/IS to determine if the proposed project would create significant impacts, the screening analysis concluded that the following environmental areas would not be significantly adversely affected by the proposed project: air quality and GHG emissions during construction and GHG emissions during operation, aesthetics, agriculture and forestry resources, biological resources, cultural resources, energy, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, solid/hazardous waste, and transportation/traffic.

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines §15126(c) requires an environmental analysis to consider "any significant irreversible environmental changes which would be involved if the proposed action should be implemented." This EA identified the topic of air quality during operation as the only environmental area potentially adversely affected by the proposed project.

Even though the proposed project would resulting NOx emission reductions foregone during operation that exceeds the applicable operational air quality significance threshold, they would for the following reasons not be expected to interfere with the air quality progress and attainment demonstration projected in the AQMP. Based on regional modeling analyses performed for the 2012 AQMP, implementing control measures contained in the 2012 AQMP, in addition to the air quality benefits of the existing rules, is anticipated to bring the district into attainment with all national and most state ambient air quality standards by the year 2023. Therefore, cumulative

operational air quality impacts from the proposed project, previous amendments and all other AQMP control measures considered together, are not expected to be significant because implementation of all AQMP control measures is expected to result in net emission reductions and overall air quality improvement. This determination is consistent with the conclusion in the 2012 AQMP Final Program EIR that direct cumulative air quality impacts from all AQMP control measures are not expected to be significant (SCAQMD, 2012). For these aforementioned reasons, the proposed project would not result in irreversible environmental changes or irretrievable commitment of resources.

POTENTIAL GROWTH-INDUCING IMPACTS

CEQA Guidelines §15126(d) requires an environmental analysis to consider the "growth inducing impact of the proposed action." Implementing the proposed project will not, by itself, have any direct or indirect growth-inducing impacts on businesses in the SCAQMD's jurisdiction because it is not expected to foster economic or population growth or the construction of additional housing and primarily affects existing facilities.

CONSISTENCY

CEQA Guidelines §15125(d) requires an EIR to discuss any inconsistencies between a proposed project and any applicable general plans or regional plans. SCAG and the SCAQMD have developed, with input from representatives of local government, the industry community, public health agencies, the USEPA - Region IX and CARB, guidance on how to assess consistency within the existing general development planning process in the Basin. Pursuant to the development and adoption of its Regional Comprehensive Plan Guide (RCPG), SCAG has developed an Intergovernmental Review Procedures Handbook (June 1, 1995). The SCAQMD also adopted criteria for assessing consistency with regional plans and the AQMP in its CEQA Air Quality Handbook. The following sections address the consistency between the proposed project and relevant regional plans pursuant to the SCAG Handbook and SCAQMD Handbook.

Consistency with Regional Comprehensive Plan and Guide (RCPG) Policies

The RCPG provides the primary reference for SCAG's project review activity. The RCPG serves as a regional framework for decision making for the growth and change that is anticipated during the next 20 years and beyond. The Growth Management Chapter (GMC) of the RCPG contains population, housing, and jobs forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review. It states that the overall goals for the region are to: 1) re-invigorate the region's economy; 2) avoid social and economic inequities and the geographical isolation of communities; and, 3) maintain the region's quality of life.

Consistency with Growth Management Chapter (GMC) to Improve the Regional Standard of Living

The Growth Management goals are to develop urban forms that enable individuals to spend less income on housing cost, that minimize public and private development costs, and that enable firms to be more competitive, strengthen the regional strategic goal to stimulate the regional economy. The proposed project in relation to the GMC would not interfere with the achievement of such goals, nor would it interfere with any powers exercised by local land use agencies. Further, the proposed project will not interfere with efforts to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.

Consistency with Growth Management Chapter (GMC) to Provide Social, Political and Cultural Equity

The Growth Management goals to develop urban forms that avoid economic and social polarization promotes the regional strategic goals of minimizing social and geographic disparities and of reaching equity among all segments of society. Consistent with the Growth Management goals, local jurisdictions, employers and service agencies should provide adequate training and retraining of workers, and prepare the labor force to meet the challenges of the regional economy. Growth Management goals also includes encouraging employment development in job-poor localities through support of labor force retraining programs and other economic development measures. Local jurisdictions and other service providers are responsible to develop sustainable communities and provide, equally to all members of society, accessible and effective services such as: public education, housing, health care, social services, recreational facilities, law enforcement, and fire protection. Implementing the proposed project has no effect on and, therefore, is not expected to interfere with the goals of providing social, political and cultural equity.

Consistency with Growth Management Chapter (GMC) to Improve the Regional Quality of Life

The Growth Management goals also include attaining mobility and clean air goals and developing urban forms that enhance quality of life, accommodate a diversity of life styles, preserve open space and natural resources, are aesthetically pleasing, preserve the character of communities, and enhance the regional strategic goal of maintaining the regional quality of life. The RCPG encourages planned development in locations least likely to cause environmental impacts, as well as supports the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals. While encouraging the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites, the plan discourages development in areas with steep slopes, high fire, flood and seismic hazards, unless complying with special design requirements. Finally, the plan encourages mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and develop emergency response and recovery plans. The proposed project has no impact on any of these issues except air quality. However, since the project would not interfere with the AQMP, it will not be inconsistent with the goal of improving the regional quality of life. Therefore, in relation to the GMC, the proposed project is not expected to interfere, but rather with attaining and maintaining the air quality portion of these goals.

Consistency with Regional Mobility Element (RMP) and Congestion Management Plan (CMP)

PARs 219 and 222 are consistent with the RMP and CMP since no significant adverse impact to transportation/circulation would result from specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Because affected facilities are not expected to increase their handling capacities, there would not be an increase in material transport trips associated with the implementation of PARs 219 and 222. Therefore, PARs 219 and 222 are not expected to significantly adversely affect circulation patterns or congestion management.

CHAPTER 5

ALTERNATIVES

Introduction

Alternatives Rejected as Infeasible

Description of Alternatives

Comparison of Alternatives

Lowest Toxic and Environmentally Superior Alternatives

Conclusion

INTRODUCTION

This ~~Draft~~ Final EA provides a discussion of alternatives to the proposed project as required by CEQA. Alternatives include measures for attaining objectives of the proposed project and provide a means for evaluating the comparative merits of each alternative. A 'no project' alternative must also be evaluated. The range of alternatives must be sufficient to permit a reasoned choice, but need not include every conceivable project alternative. CEQA Guidelines §15126.6(c) specifically notes that the range of alternatives required in a CEQA document is governed by a 'rule of reason' and only necessitates that the CEQA document set forth those alternatives necessary to permit a reasoned choice. The key issue is whether the selection and discussion of alternatives fosters informed decision making and meaningful public participation. A CEQA document need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative. SCAQMD Rule 110 (the rule which implements the SCAQMD's certified regulatory program) does not impose any greater requirements for a discussion of project alternatives in an environmental assessment than is required for an EIR under CEQA.

Three alternatives to the proposed project are summarized in Table 5-1: Alternative A (No Project), Alternative B (Reduction in Size), and Alternative C (Excluded Equipment). Pursuant to CEQA Guidelines §15126.6 (b) the purpose of an alternatives analysis is to reduce or avoid potentially significant adverse effects that a project may have on the environment. The only environmental topic area identified in the NOP/IS that may be adversely affected by the proposed project was air quality impacts during operation. A comprehensive analysis of project-specific and cumulative operational air quality impacts is included in Chapter 4 of this document. In addition to identifying project alternatives, this chapter provides a comparison of the potential operational air quality impacts from each of the project alternatives relative to the proposed project, which are summarized in Table 5-2. Aside from this topic, no other significant adverse impacts were identified for the proposed project or any of the project alternatives. As indicated in the following discussions, the proposed project is considered to provide the best balance between meeting the objectives of the project while minimizing potentially significant adverse environmental impacts.

ALTERNATIVES REJECTED AS INFEASIBLE

A CEQA document should identify any alternatives that were considered by the lead agency, but were rejected as infeasible during the scoping process and explain the reasons underlying the lead agency's determination [CEQA Guidelines §15126.6(c)].

Equipment categories or operations added to Rule 219 are considered to be low emitting and most are not currently subject to applicable rule requirements or permit conditions. For the proposed project these types of equipment or operations have little or no effect on operational emission impacts. Consequently, although potential alternatives to limit the number of equipment categories of small equipment added to Rule 219 is considered a feasible alternative, it does not serve the purpose of an alternatives analysis, which is to reduce potentially significant adverse impacts that would otherwise be generated by the proposed project. Therefore, this type of reduced category exemption is not considered further.

As indicated in Chapter 4, only equipment that are currently subject to either Rule 1110.2 or Rule 1147 contribute to significant adverse operational NOx air quality impacts because these equipment would no longer be subject to their respective rules. Alternatives similar to Alternative B, which would lower the size of additional categories of equipment besides tar pots

were also considered. However, the remaining equipment categories for Rule 1147 equipment are standard in sizes, so reducing the sizes of other 1147 equipment is not considered to be a feasible alternative.

Table 5-1
Summary of PARs 219 and 222 and Project Alternatives

Project	Project Description
Proposed Project	Existing list of affected equipment that contribute to significant adverse operation NOx air quality impacts would include power pressure washers, asphalt day tankers, tar pots, food ovens, portable diesel-fueled heaters, diesel-fueled boilers, and piston-type internal combustion engines used at remote two-way radio transmission towers.
Alternative A (No Project)	PARs 219 and 222 would not be amended. The net result is that equipment would still be subject to permitting requirements and Rule 1110.2 and Rule 1147 equipment would continue to be subject to their respective rules.
Alternative B (Reduction in Size)	The affected equipment size for asphalt day tankers and tar pots would be lowered.
Alternative C (Excluded Equipment)	Power pressure washers and food ovens would not be included in PARs 219 and 222.

Table 5-2
Comparison of Adverse Environmental Impacts of the Alternatives

Category	Proposed Project	Alternative A: No Project	Alternative B: Reduction in Size	Alternative C: Excluded Equipment
Operational NOx Air Quality Impacts	139 pounds of NOx emission reductions foregone per day.	No change from existing setting, (i.e., 139 pounds of NOx emission reductions from affected Rule 1110.2 and 1147 equipment)	136 pounds of NOx emission reductions foregone per day.	103 pounds of NOx emission reductions foregone per day.
Significant?	Yes	No	Yes	Yes

An Alternative similar to Alternative C was considered, which would eliminate additional categories of equipment from the proposed project. For Alternative C, power pressure washers and food ovens would be removed from the proposed project because, in some cases Rule 1147 compliance options may be considered feasible. However, review of the remaining Rule 1147 equipment categories indicated that compliance options were too costly or required replacing the equipment category with a new piece of equipment operating on natural gas or other clean fuels. As already noted, the intent of Rule 1147 is a retrofit rule, not an equipment replacement rule. Therefore, this alternative was also rejected as infeasible.

DESCRIPTION OF ALTERNATIVES

The project alternatives described in the following subsections were developed by modifying specific components of the proposed project. The rationale for selecting and modifying specific components of the proposed project to generate feasible alternatives for the analysis is based on CEQA's requirement to present "realistic" alternatives; that is, alternatives that can actually be implemented.

It was concluded in the analysis of operational NOx air quality impacts from the proposed project in Chapter 4 of this EA that, of the amendments proposed, only the components that result in eliminating NOx emission limits for equipment currently subject to Rules 1110.2 or 1147, could have potentially significant adverse NOx air quality impacts during operation. As such, the following three alternatives were developed by identifying and modifying major components of the proposed project. Specifically, the primary components of the proposed alternatives that have been modified are the source categories that may contribute to significant NOx air quality impacts. The alternatives, summarized in Table 5-1 and described in more detail in the following subsections, include the following: Alternative A – No Project, Alternative B – Size Reduction, and Alternative C – Excluded Equipment. Unless otherwise specifically noted, all other components of the project alternatives are identical to the components of the proposed project. The following subsections provide a brief description of each alternative.

Alternative A - No Project

Alternative A or 'no project' means that the proposed project would not be adopted and the current universe of equipment would continue to be subject to permitting requirements and equipment currently subject to Rules 1110.2 or 1147 would continue to be subject to the NOx emission limits according to the current compliance schedules for each rule. By continuing to subject equipment regulated by Rules 1110.2 or 1147 to NOx emission control requirements pursuant to the currently compliance schedule for certain in-use equipment categories, some equipment owners/operators would continue to experience compliance challenges with the NOx control requirements and certain compliance dates in the rules. In some cases, the effective dates may have already passed. Thus, under Alternative A, owners/operators of equipment not able to meet the applicable NOx emission limits under Rule 1110.2 or Rule 1147 would likely need to shut down the affected equipment. No significant adverse operational NOx air quality impacts would occur from shutting down non-compliant equipment under Alternative A because the NOx emission reductions would occur according to the original schedule in Rule 1147.

Alternative B – Reduction in Size

SCAQMD staff evaluated all equipment currently subject to Rules 1110.2 or 1147 proposed to be included in PARs 219 and 222 and that contribute to significant adverse operational NOx emission reductions foregone to determine if equipment size could be reduced thereby reducing the amount of NOx emission reductions foregone. The results of the evaluation of size for each piece of affected equipment are summarized in Table 5-3. The evaluation results identified only asphalt day tankers and tar pots as equipment where the size could be reduced. Therefore, Alternative B would exempt asphalt day tankers with a holding capacity of less than 4,000 gallons and tar pots with a holding capacity of less than 800 gallons per day from written permit requirements. Like the proposed project, Alternative B would continue to include filing requirements under Rule 222 for asphalt day tankers and tar pots exempted from written permit.

Table 5-3
Equipment That Could Be Adjusted in Size or Excluded from PAR 219 and 222

Equipment Categories	Adjustment to Equipment Size	Exclude from PAR 219 and 222
Power Pressure Washers	Cannot be size adjusted, standard equipment size	Could be excluded because electric equipment potentially available
Asphalt Day Tankers	A reduction in capacity could be made, which would exclude the largest asphalt day tankers in the proposed project.	No exclusion, affected equipment is already LPG fired, cannot electrify.
Tar Pots	A reduction in capacity could be made, which would exclude the largest tar pots in the proposed project.	No exclusion, affected equipment is already LPG fired, cannot electrify.
Food Ovens	Cannot be size adjusted, standard equipment size	Could be excluded because electric equipment potentially available
Portable Diesel-fueled Heaters	Cannot be size adjusted, standard equipment size	No exclusion, diesel fuel is safest portable fuel
Diesel-fueled Boiler	Cannot be size adjusted, equipment is sized to use	No exclusion, controls and monitoring equipment and alternative fuel cannot support boilers when equipment cannot be accessed because of weather.
Piston-type Internal Combustion Engines at Remote Two-Way Radio Transmission Towers	Cannot be size adjusted, equipment is sized to use	No exclusion, controls and monitoring equipment and alternative fuel cannot support engines when equipment cannot be accessed because of weather.

Alternative C – Excluded Equipment

SCAQMD staff evaluated all equipment currently subject to Rules 1110.2 or 1147 proposed to be included in PARs 219 and 222 and that contribute to significant adverse operational NOx emission reductions foregone to determine if any equipment could be excluded from the proposed project because of the potential availability of replacement equipment powered by clean fuels, including electricity. The results of the evaluation to identify affected equipment that could be excluded from the proposed project are summarized in Table 5-3. It was concluded in the review of equipment that could be eliminated from the proposed project that only power pressure washers and small food ovens could be feasibly excluded because of the availability of potential replacements that would be operated on electricity. Therefore, Alternative C would exclude power pressure washers and food ovens from PARs 219 and 222.

COMPARISON OF THE ALTERNATIVES

The following section describes the potential adverse operational NO_x air quality impacts that may be generated by each project alternative compared to the proposed project. The operational NO_x air quality impacts for the proposed project and each project alternative are also provided in Table 5-2.

AIR QUALITY

Alternative A - No Project

Unlike the proposed project, it is not anticipated that Alternative A would generate significant adverse NO_x emission impacts during operation because owners/operators of affected equipment/source categories currently subject to either Rule 1110.2 or Rule 1147 would continue to be subject to the applicable NO_x emission limits in accordance with the current compliance schedules in each rule. By not adopting the proposed project, the projected NO_x emission reductions identified in the applicable CEQA documents for Rules 1110.2 or 1147 and corresponding health benefits would be expected to occur according to the original compliance schedules for each rule through installing control equipment, if available; replacing existing equipment with new compliant equipment; or taking the affected non-compliant equipment out of service. Consequently, Alternative A would achieve the 139 pounds per day of NO_x emission reductions that would otherwise be foregone under the proposed project.

Alternative B – Reduction in Size

Since the asphalt day tankers and tar pots are LPG-fired, it is unlikely that retrofitting equipment with low NO_x burners would result in any NO_x emission reductions because LPG is generally a clean burning fuel. Currently, there is no technology to reduce the NO_x emissions from the burner(s) typically used in asphalt day tankers and tar pots. Therefore, similar to the proposed project, there would be no construction emission from retrofitting equipment associated with Alternative B.

Large asphalt day tankers and tar pots that would be excluded from Rules 219 and 222 under Alternative B would continue to be subject to Rule 1147 NO_x concentration limits. Specifically, of the 58 existing asphalt day tankers that would qualify to be exempted from written permits under PARs 219 and 222, eight have an asphalt holding capacity of 4,000 gallons or greater (4,000 to 4,200 gallons). Of the existing 50 units that would qualify to be exempted from written permits under Alternative B, 12 have an asphalt holding capacity of 3,878 gallons. All remaining affected tanks are 3,600 gallons in holding capacity or less.

Because fewer asphalt day tankers would be included in Alternative B, NO_x emission reductions foregone would be less than NO_x emission reductions foregone. Alternative B would result in operational NO_x emission reductions foregone of 8.4 pounds per day from asphalt day tankers compared to the operational NO_x emission reductions foregone from the proposed project of 10 pounds per day from asphalt day tankers. Detailed calculations are presented in Appendix C.

Of the 147 tar pots that would be included in PARs 219 and 222, two of the existing tar pots have a tar holding capacity of 1,000 gallons and two have a tar holding capacity of 845 gallons. All of the remaining 143 affected tar pots have a tar holding capacity of 750 gallons or less and would be included in Alternative 3.

Since the exemption from written permit requirements pursuant to Rule 219 and filing requirement under Rule 222 would be limited to tar pots with a holding capacity of less than 800 gallons, then Alternative B would result in NO_x emission reductions foregone of 35 pounds per day from tar pots compared to 37 pounds per day of NO_x emission reductions foregone from the proposed project from tar pots.

Alternative B would result in 136 pounds of NO_x emission reduction foregone, which is three pounds fewer NO_x emission reduction foregone than the proposed project. Detailed calculations are presented in Appendix C.

Alternative C – Excluded Equipment

All 258 power pressure washers and all 55 small food ovens that would qualify to be exempted from written permits under PARs 219 and 222 would be excluded from Alternative C because it is assumed that these types of equipment could be replaced with electric equipment. Excluding power pressure washers and small food ovens means that these types of equipment would continue to be subject the Rule 1147 NO_x control requirements, but more likely, would replace equipment with electric equipment and would no longer be subject to Rule 1147.

To analyze the operation emission effects of Alternative C, it was assumed that existing equipment would be replaced with electric equipment because electric equipment is assumed to be the only feasible compliance option available. Using this assumption, direct emissions from affected equipment would be eliminated, or zero emissions, instead of continuing to produce combustion emissions in compliance with the Rule 1147 NO_x control requirements of 40 ppm NO_x concentration limit for power pressure washers and 30 ppm NO_x concentration limit for small food ovens. There would be emissions from the generation of electricity to power these units, but the emissions would be less than the emissions generated by the existing units. To provide a conservative analysis, it was assumed that the NO_x emissions from Rule 1147 compliant equipment would be equivalent to the expected 40 ppm NO_x concentration limit for power pressure washer and the 30 ppm NO_x concentration limit for small food ovens, which would result in no NO_x emission reductions foregone from the portable power pressure washer and food ovens. This means that the originally anticipated NO_x emission reductions from these categories of equipment identified in the CEQA document for Rule 1147 would continue to occur, resulting in lower emission reductions foregone compared to the proposed project as explained in the following paragraph. Detailed calculations are presented in Appendix C.

Excluding power pressure washers and small food ovens from Alternative C would result in 103 pounds per day of operational NO_x emission reductions foregone compared to 139 pounds per day of operational NO_x emission reductions foregone per day under the proposed project, a difference of 36 pounds per day of operational NO_x emission reductions foregone (12 pounds per day NO_x emission reductions foregone per day from power pressure washers under the proposed project – 24 pounds per day NO_x emission reductions foregone per day from small food ovens under the proposed project).

LOWEST TOXIC AND ENVIRONMENTALLY SUPERIOR ALTERNATIVES

In accordance with SCAQMD's policy document Environmental Justice Program Enhancements for FY 2002-03, Enhancement II-1 recommends that all SCAQMD CEQA assessments include a feasible project alternative with the lowest air toxics emissions. In other words, for any major equipment or process type under the scope of the proposed project that creates a significant

environmental impact, at least one alternative, where feasible, shall be considered from a “least harmful” perspective with regard to hazardous air emissions.

As indicated in Table 4-2, most equipment added to Rule 219 and/or 222 would continue to be subject to any applicable rules and existing permit conditions so any emissions from these categories of equipment would not change. Other equipment currently subject to Rules 1110.2 or 1147 that would be added to Rules 219 and 222 are generally subject to NO_x control requirements and in the case of Rule 1110.2 are also subject to VOC and CO control requirements, not air toxics control requirements. However, the combustion fuel for many categories of affected equipment is diesel, which produces diesel particulates that are considered to be carcinogenic. For example, if the Rule 1147 equipment were to continue to be subject to the NO_x emission reduction requirements, they would not be able to meet the NO_x emission limits, so operators would either replace diesel-fueled equipment with new replacement units or the equipment would not be able to operate. Since diesel particulate matter is considered a carcinogenic toxic air contaminant, replacement or elimination of equipment fueled by diesel would result in less health risk. Thus, from the air toxics perspective, when compared to the proposed project and the other alternatives under consideration, if implemented, Alternative A is considered the lowest toxic alternative.

Implementing Alternative A means that there would be no NO_x emission reductions foregone and the corresponding health benefits that result from the NO_x emission reductions would occur compared to the proposed project and Alternatives B and C. Thus, Alternative A is considered to be the environmentally superior alternative. However, if the no project” alternative is determined to be the environmentally superior alternative, then the CEQA document shall identify an environmentally superior alternative among the other alternatives (CEQA Guidelines §15126.6 (e)(2)). Of the remaining alternatives evaluated, Alternative C is considered to be the environmentally superior alternative because it would result in the lowest level of operational NO_x emission reductions foregone, 103 pounds per day of NO_x emission reductions foregone per day compared to 139 pounds per day of operational NO_x emissions foregone from the proposed project and 136 pounds per day of operational emission reductions foregone from Alternative B.

CONCLUSION

By not adopting the proposed project, Alternative A would achieve the 139 pounds per day of operational NO_x emission reductions from Rule 1110.2 and Rule 1147 affected equipment. Implementing the NO_x emission reductions according to Rule 1110.2 and Rule 1147 would achieve the NO_x reduction goals and compliance objectives of these two rules and contribute to attaining the federal PM 2.5 standard by 2014 and the federal 8-hour ozone standard by 2023. However, Alternative A would not achieve any of the project objectives for the proposed project because: it would not provide regulatory relief to operators of equipment currently subject to Rule 1147 (project objective #1); it would not ensure public safety or provide regulatory relief to operators of equipment currently subject Rule 1110.2 (project objectives #2 and #3); and it would not provide administrative relief to operators of low emitting equipment by exempting them from written permit requirements pursuant to Rule 219 (project objective #4) or only requiring simple filing pursuant to Rule 222 (project objective #5).

Alternative B would exclude asphalt day tankers with a capacity of 4,000 gallons or greater and asphalt tar pots with a capacity of 800 gallons or greater. If Alternative B were implemented, it would result in 136 pounds of operational NO_x emission reductions foregone per day, which

would exceed the operational NOx emissions significance threshold of 55 pounds per day. Therefore, Alternative B would be significance for NOx emission reductions foregone, but it would be three pounds of NOx emission reductions foregone per day less than the proposed project. Although Alternative B would achieve project objectives #2 and #3 (provide regulatory relief to operators of equipment currently subject Rule 1110.2 as effectively as the proposed project and ensure public safety; it would not achieve project objective #1 (provide regulatory relief to operators of equipment currently subject to Rule 1147) as effectively as the proposed project; nor would it achieve project alternatives #4 (provide administrative relief to operators of low emitting equipment by exempting them from written permit requirements pursuant to Rule 219) and #5 (provide administrative relief to operators of low emitting equipment by exempting them from written permit requirements pursuant to Rule 219) as effectively as the proposed project. The reason that Alternative B does not achieve project objectives #1, #4, and #5 as effectively as the proposed project is that fewer equipment categories that would otherwise be subject to Rule 1147 would be granted regulatory and administrative relief compared to the proposed project.

By excluding power pressure washers and small food ovens from Alternative C, operational NOx emission reductions foregone would be substantially reduced to 103 pounds per day compared NOx emission reductions foregone from the proposed project, 139 pounds per day. However, NOx emission reductions foregone from Alternative C would still exceed the SCAQMD's operational NOx significance threshold of 55 pounds per day. Therefore Alternative C would be significant for NOx emission reductions foregone, but it would be 36 pounds of NOx emission reductions foregone per day less than the proposed project. Although Alternative C would achieve project objective #2 and #3 (provide regulatory relief to operators of equipment currently subject Rule 1110.2 and ensure public safety) as effectively as the proposed project; it would not achieve project objective #1 (provide regulatory relief to operators of equipment currently subject to Rule 1147) as effectively as the proposed project; nor would it achieve project alternatives #4 and #5 as effectively as the proposed project. The reason that Alternative C does not achieve project objectives #1, #4, and #5 as effectively as the proposed project is that fewer equipment categories that would otherwise be subject to Rule 1147 would be granted regulatory and administrative relief compared to the proposed project.

When comparing the environmental effects of the project alternatives with the proposed project and evaluating the effectiveness achieving the project objectives of the proposed project to the project alternatives, the proposed project provides the best balance in achieving the project objectives while minimizing environmental impacts.

APPENDIX A (OF THE ~~DRAFT~~ FINAL ENVIRONMENTAL ASSESSMENT)

PROPOSED AMENDED RULES 219 AND 222

In order to save space and avoid repetition, please refer to the latest version of PARs 219 and 222 located elsewhere in the final rule package. The PARs 219 and 222 versions dated April 2013 of the proposed amended rules were circulated with the Draft EA released on February 8, 2013 for a 45-day public review and comment period ending March 26, 2013.

Original hard copies of the Draft EA, which include PARs 219 and 222 (dated April 2013) of the proposed amended rules circulated with the Draft EA, can be obtained through the SCAQMD Public Information Center at the Diamond Bar headquarters or by calling (909) 396-2039.

APPENDIX B (OF THE ~~DRAFT~~ FINAL ENVIRONMETNAL ASSESSMENT)

NOTICE OF PREPARATION/INITIAL STUDY (Environmental Checklist)



South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • <http://www.aqmd.gov>

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL ASSESSMENT

PROJECT TITLE: PROPOSED AMENDED RULE 219 – EQUIPMENT NOT REQUIRING A WRITTEN PERMIT PURSUANT TO REGULATION II AND PROPOSED AMENDED RULE 222 – FILING REQUIREMENTS FOR SPECIFIC EMISSION SOURCES NOT REQUIRING A WRITTEN PERMIT PURSUANT TO REGULATION II

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD), as the Lead Agency, has prepared this Notice of Preparation of a Draft Environmental Assessment (NOP) and Initial Study (IS). This NOP and IS serve two purposes: 1) to solicit information on the scope of the environmental analysis for the proposed project, and 2) to notify the public that the SCAQMD will prepare a Draft Environmental Assessment (EA) to further assess potential environmental impacts that may result from implementing the proposed project.

This letter, NOP and the attached IS are not SCAQMD applications or forms requiring a response from you. Their purpose is simply to provide information to you on the above project. If the proposed project has no bearing on you or your organization, no action on your part is necessary.

Comments focusing on your area of expertise, your agency's area of jurisdiction, or issues relative to the environmental analysis should be addressed to Mr. James Koizumi (c/o CEQA) at the address shown above, or sent by FAX to (909) 396-3324 or by e-mail to jkoizumi@aqmd.gov. Comments must be received no later than 5:00 PM on Friday, November 16, 2012. Please include the name and phone number of the contact person for your agency. Questions regarding the proposed amendments should be directed to Mr. Don Hopps at (909) 396-2334. Please include the name and phone number of the contact person for your agency.

A CEQA Scoping Meeting to solicit public input on the scope of the analysis to be included in the Draft EA is scheduled for November 8, 2012 at 1:00 p.m at SCAQMD Headquarters. The Public Hearing for the proposed amended regulation is scheduled for March 1, 2013 at SCAQMD Headquarters. (Note: Public meeting dates are subject to change).

Date: October 17, 2012

Signature: Steve Smith

Title: Steve Smith, Ph.D.
Program Supervisor

Telephone: (909) 396-3054

Reference: California Code of Regulations, Title 14, §§15087, 15105, 15162 and 15372

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765-4182

NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL ASSESSMENT

Project Title:

Proposed Amended Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II and
Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written
Permit Pursuant to Regulation II

Project Location:

South Coast Air Quality Management District (SCAQMD) area of jurisdiction consisting of the four-county
South Coast Air Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San
Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin and the Mojave Desert
Air Basin

Description of Nature, Purpose, and Beneficiaries of Project: PAR 219 would provide an exemption to a
written permit or filing requirements for certain additional equipment, processes, or operations that produce
small amounts of air contaminants. Sources added to PAR 219 would not be issued operating parameters from
the SCAQMD. PAR 222 would provide access to a simple and efficient filing system for certain additional
low-emitting emission sources. Sources added to PAR 222 would continue to be subject to existing written
permit conditions. SCAQMD staff is also proposing to add some types of equipment to both PAR 219 (to
exempt them from permit requirements) and PAR 222 (to track equipment by imposing filing requirements).
Equipment added to both PARs 219 and 222 include certain types of equipment currently regulated by Rule
1110.2 and Rule 1147: portable power pressure washers, asphalt day tankers, asphalt tar pots, small food
ovens, portable diesel heaters, diesel boilers, and remote two-way radio transmission power sources. Sources
that would be added to PAR 219, but not PAR 222 include air pollution control devices for Rule 219
equipment; cosmetic filling stations and related filling equipment; laser cutting, etching and engraving
equipment; and aerosol can recycling systems. Text would also be added to PAR 219 and PAR 222 to clarify
the intent of existing provisions and the enforceability of the conditions imposed by PAR 222. Significant
adverse operational air quality impacts will be analyzed further in the Draft Environmental Assessment. No
other significant adverse impacts were identified in the Initial Study.

Lead Agency:

South Coast Air Quality Management District

Division:

Planning, Rule Development and Area Sources

**The Initial Study and all supporting
documentation are available at:**

SCAQMD Headquarters
21865 Copley Drive
Diamond Bar, CA 91765

or by calling:

(909) 396-2039

**The Initial Study can also be obtained
by accessing the SCAQMD's website
at:**

<http://www.aqmd.gov/ceqa/aqmd.html>

The Public Notice of Preparation is provided through the following:

☒ Los Angeles Times (October 18, 2012) ☒ SCAQMD Website ☒ SCAQMD Mailing List

Initial Study Review Period (30-day):

October 18, 2012– November 16, 2012

Scheduled Public Meeting Dates (subject to change):

CEQA Scoping Meeting: November 8, 2012, 1:00 p.m.; SCAQMD Headquarters

SCAQMD Governing Board Hearing: March 1, 2013, 9:00 a.m.; SCAQMD Headquarters

Send CEQA Comments to:

Mr. James Koizumi

Phone:

(909) 396-3234

Email:

jkoizumi@aqmd.gov

Fax:

(909) 396-3324

**Direct Questions on Proposed
Amend Rules:**

Mr. Don Hopps

Phone:

(909) 396-2334

Email:

dhopps@aqmd.gov

Fax:

(909) 396-3324

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Initial Study for:

**Proposed Amended Rule 219 –Equipment Not Requiring a Written Permit Pursuant to Regulation II,
Proposed Amended Rule 222 – Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II**

October 2012

SCAQMD No. 121017JK

Executive Officer

Barry R. Wallerstein, D. Env.

Deputy Executive Officer

Planning, Rule Development and Area Sources

Elaine Chang, DrPH

Assistant Deputy Executive Officer

Planning, Rule Development and Area Sources

Laki Tisopulos, Ph.D., P.E.

Planning and Rules Manager

Planning, Rule Development and Area Sources

Susan Nakamura

Author:	James Koizumi	Air Quality Specialist
Technical Assistance:	Don Hopps Wayne Barcikowski	Air Quality Specialist Air Quality Specialist
Reviewed By:	Steve Smith, Ph.D. Naveen Berry Robert Pease Lauren Nevitt Veera Tyagi Barbara Baird	Program Supervisor, CEQA Planning and Rules Manager Program Supervisor Deputy District Counsel II Senior Deputy District Counsel District Counsel

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD**

CHAIRMAN: WILLIAM A. BURKE, Ed.D.
Speaker of the Assembly Appointee

VICE CHAIR: DENNIS R. YATES
Mayor, City of Chino
Cities Representative, San Bernardino County

MEMBERS:

MICHAEL D. ANTONOVICH
Supervisor, Fifth District
Los Angeles County Representative

JOHN J. BENOIT
Supervisor, Fourth District
Riverside County Representative

MICHAEL A. CACCIOTTI
Mayor, City of South Pasadena
Cities of Los Angeles County, Eastern Region

JOSIE GONZALES
Supervisor, Fifth District
San Bernardino County Representative

RONALD O. LOVERIDGE
Mayor, City of Riverside
Cities Representative, Riverside County

JOSEPH K. LYOU, Ph.D.
Governor's Appointee

JUDITH MITCHELL
Councilmember, Rolling Hills Estates
Cities of Los Angeles County, Western Region

SHAWN NELSON
Supervisor, Fourth District
Orange County Representative

Dr. CLARK E. PARKER, Sr.
Senate Rules Committee Appointee

JAN PERRY
Councilwoman, Ninth District
City of Los Angeles Representative

MIGUEL A. PULIDO
Mayor, City of Santa Ana
Cities Representative, Orange County

EXECUTIVE OFFICER:
BARRY R. WALLERSTEIN, D.Env.

TABLE OF CONTENTS

CHAPTER 1

Introduction.....	1-1
California Environmental Quality Act.....	1-1
Project Location.....	1-2
Project Objective.....	1-3
Project Background.....	1-3
Project Description.....	1-4
Alternatives.....	1-13

CHAPTER 2

Introduction.....	2-1
General Information.....	2-1
Environmental Factors Potentially Affected.....	2-2
Determination	2-3
Environmental Checklist and Discussion	2-4

APPENDIX A – Proposed Amended Rules 219 and 222

APPENDIX B – Assumptions and Calculations

LIST OF FIGURES

Figure 1 South Coast Air Quality Management District	1-2
--	-----

LIST OF TABLES

Table 2-1 SCAQMD Air Quality Significance Thresholds.....	2-11
Table 2-2 PAR 219 and/or PAR 222 Provisions and Effects	2-14
Table 2-3 PARs 219 and 222 Equipment Categories with Potential NO _x Emission Reductions Foregone.....	2-20
Table 2-4 GHG Emission Reductions Foregone for PAR 219 and 222	2-23

CHAPTER 1

PROJECT DESCRIPTION

Introduction

California Environmental Quality Act

Project Location

Project Objective

Project Background

Project Description

Alternatives

INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977¹ as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin referred to herein as the district. The SCAQMD Governing Board adopts policies and regulations that promote clean air within its jurisdiction. The SCAQMD Governing Board obtains its authority to adopt, amend or repeal rules and regulations from Health and Safety Code §§ 40000, 40001, and 40440.

SCAQMD Regulation II consists of rules that guide the SCAQMD's permitting system. These include rules and requirements for submitting permit applications; content of permit applications, permits to construct and operate; denying, posting, transferring or voiding permits; plans required for permits; exemptions to written permits and filing requirements for specific sources not requiring a written permit. SCAQMD staff is proposing to amend Rules 219 and 222 of Regulation II to add additional equipment, processes, or operations, as described in the project description, that will either be exempt from requiring a permit or will be provided a streamlined filing process in lieu of a written permit.

SCAQMD Rule 219 currently provides a permitting exemption for equipment, processes, or operations that produce small amounts of air contaminants. The exemption from a written permit requirement provided by Rule 219 is only applicable if the equipment, process, or operation is in compliance with subdivision (t) - recordkeeping.

SCAQMD Rule 222 currently provides access to a simple and efficient filing system for low-emitting emission sources. Rule 222 requires owners and operators of specified emission sources to submit information regarding emissions, including, but not limited to; (1) a description of the emission source; (2) data necessary to estimate emissions from the emission source; and (3) information to determine whether the emission source is operating in compliance with applicable SCAQMD, state, and federal rules and regulations. Thus, the filing system allows the SCAQMD staff to develop accurate emissions in the emissions inventories for the respective source categories, while providing relief from the burden of the traditional detailed permitting system and its associated cost.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Amending Rules 219 and 222 is a discretionary action, which has the potential for resulting in direct or indirect change to the environment and, therefore, is considered a "project" as defined by the California Environmental Quality Act (CEQA). SCAQMD is the lead agency for the proposed project. California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Resources Agency has certified the regulatory program. SCAQMD's regulatory program was certified by the Secretary of the Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110.

CEQA and Rule 110 require that potential adverse environmental impacts of proposed projects be evaluated and that feasible methods to reduce or avoid significant adverse environmental impacts of these projects be identified. To fulfill the purpose and intent of CEQA, the SCAQMD

¹ The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch 324 (codified at Health & Safety Code, §§40400-40540).

has prepared this NOP/IS to address the potential adverse environmental impacts associated with the proposed project. The NOP/IS is an informational document intended to: (a) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental effects of the proposed project; and, (b) identify possible ways to minimize the significant effects.

SCAQMD's review of the proposed project shows that the proposed project has the potential to generate significant NO_x air quality impacts on the environment. The analysis in Chapter 2 supports the conclusion of no significant adverse environmental impacts for all other environmental topics. Comments received on the NOP/IS during the 30-day public review period will be addressed and included in the Draft Environmental Assessment (EA).

PROJECT LOCATION

The SCAQMD has jurisdiction over an area of 10,473 square miles (referred to hereafter as the district), consisting of the four-county South Coast Air Basin and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The 6,745 square-mile Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB and MDAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. The federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of both Riverside County and the SSAB and is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (Figure 1).

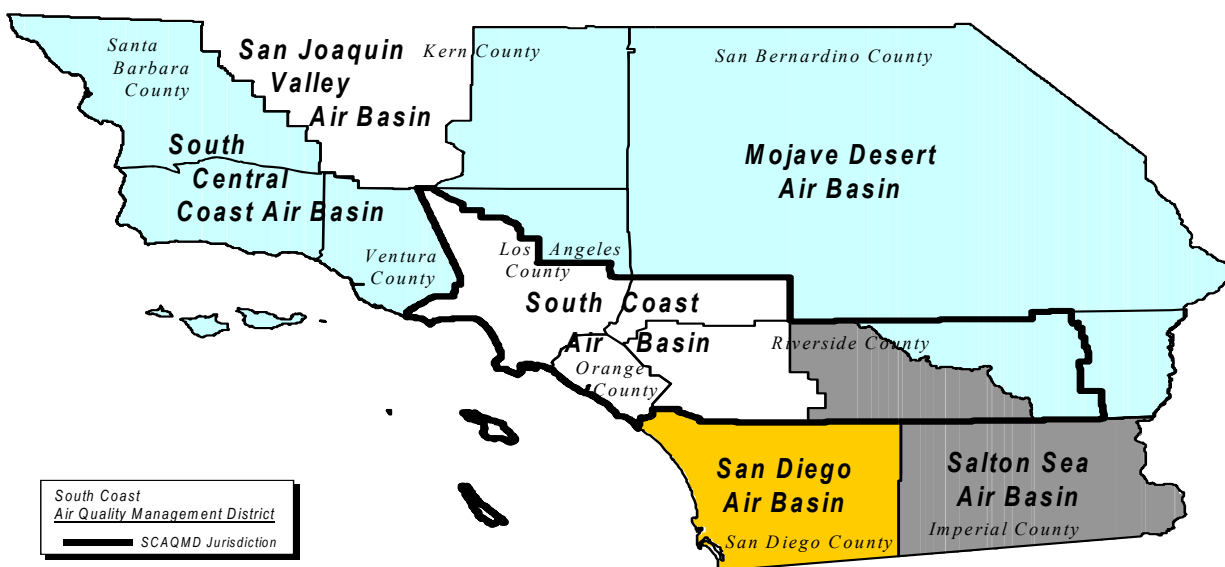


Figure 1
Boundaries of the South Coast Air Quality Management District

PROJECT OBJECTIVES

The objectives of PARs 219 and 222 would be to:

- Provide regulatory relief to operators of small NO_x emitting equipment (less than 0.5 pound per day) that would otherwise be subject to the NO_x emission control requirements of Rule 1147.
- Provide regulatory relief to operators of diesel engines located in remote areas without access to natural gas, and with NO_x emissions less than one pound per day that would otherwise be subject to Rule 1110.2.
- Provide administrative relief for low-emitting equipment not otherwise subject to Rule 1147 or Rule 1110.2, as described above, by not requiring a permit pursuant to Rule 219.
- Provide administrative relief for low-emitting equipment not otherwise subject to Rule 1147 or Rule 1110.2 as described above, but requiring simplified filing pursuant to Rule 222. Such equipment would still be subject to any existing permit requirements or applicable rule requirements.

PROJECT BACKGROUND

Rule 219

Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II - is an administrative rule that identifies equipment, processes, or operations that emit small amounts of air contaminants that shall not require written permits, unless such equipment, process or operation is subject to subdivision (s) - Exceptions. In addition, an exemption from a written permit requirement provided by this rule is only applicable if the equipment, process, or operation is in compliance with subdivision (t) - Recordkeeping.

Rule 219 was adopted on January 9, 1976, and has subsequently been amended seventeen times to add low-emitting equipment; this proposed amendment would be the eighteenth amendment to the rule. It was most recently amendment on June 1, 2007.

Rule 219 affects any industry that uses equipment, processes, or operations that produce small amounts of air contaminants by providing an exemption to written permit for such equipment. These types of equipment, processes, or operations that emit small amounts of air contaminants can be at small business operations or large source operations. Rule 219 equipment are still subject to any applicable Regulation IV and XI rules.

Rule 222

Rule 222 - Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant To Regulation II - provides an alternative to SCAQMD written permits by allowing certain emission sources that meet predetermined criteria to register the emission source in the Rule 222 filing program. Affected emission sources are smaller emitters and less complex sources than those typically requiring permits. Rule 222 affected emission sources do not require a written permit but do require filing pursuant to the Rule 222 filing program. Rule 222 affected equipment are also subject to written operating conditions, which result in limiting unnecessary or excessive air contaminant emissions. The Rule 222 filing program offers simplicity and efficiency in processing the applications for the emission sources for these low-emitting emission sources when compared to the traditional written permit, which typically includes permit pre-screening, permit analysis, and permit evaluation, originally designed to evaluate more complex, higher emitting emission sources. In addition, the filing program for

such equipment allows the SCAQMD staff to develop accurate emissions inventories for the respective source categories. Finally, the owner/operator would benefit from the faster turnaround time for processing and the reduced cost when compared to a typical written permit.

The current Rule 222 requires owners and operators of specified emission sources to submit information regarding emissions, including, but not limited to; (1) a description of the emission source; (2) data necessary to estimate emissions from the emission source; and (3) information to determine whether the emission source is operating in compliance with applicable SCAQMD, state, and federal rules and regulations.

Rule 222 was adopted on September 11, 1998, and has been amended three times, this proposed amendment would be the fourth amendment to the rule. It was most recently amended on December 5, 2008.

PROJECT DESCRIPTION

The following is a summary of the proposed amendments to PARs 219 and 222. A copy of PARs 219 and 222 can be found in Appendix A.

PAR 219

Subdivision - Purpose

No change.

Subdivision (a) – Mobile Equipment

Pavement heating machines would be given its own subparagraph (a)(5) and would be clarified to be asphalt pavement heaters, which are any mobile equipment used for road maintenance and new road construction.

The SCAQMD database shows two permitted asphalt pavement heaters. One asphalt pavement heater has a rated maximum heat input capacity of 180,000 British thermal units (Btu) per hour, with kerosene-fired burners, and the other one has a rated maximum heat input capacity of 660,938 Btu per hour, with propane-fired burners. Asphalt pavement heaters are mobile equipment and are used by road construction personnel to heat asphalt or coal tar pitch for purposes of road maintenance or new road construction operations.

Subdivision (b) – Combustion and Heat Transfer Equipment

- (b)(1) – Piston type internal combustion engines with a manufacturer's rating of 100 brake horsepower or less that are used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within one half mile radius would be exempted. Micro-turbines with a rated maximum heat input capacity of 3,500,000 British thermal units (Btu) per hour or less would be exempted, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation with the state of California or were in operation prior to the date of amendment.

There are 16 remote two-way radio transmission power sources, currently subject to Rule 1110.2, that are solely diesel fueled and are operating with a District permit in rural areas where there are no provisions for natural gas, electricity or alternate fuels. Two engines are

operated at each affected facility. Each engine is used alternately for a combined operation of 24 hours a day, seven days per week, and 52 weeks a year.

There are currently 16 permitted micro-turbines operating in the district. The micro-turbines are significantly smaller internal combustion turbine engines when compared to conventional turbine engines, and like the conventional turbine engines they typically drive a generator which produces electrical power. The electrical power can be used by the facility or sold back to the electrical provider responsible for servicing the grid. Micro-turbines can run on a variety of fuels such as natural gas, diesel fuel, gasoline, landfill gases, and digester gases. The micro-turbines are generally grouped in numbers and a typical landfill permit, where they are most used. Up to ten micro-turbines have been permitted at a single site, each rated at 420,000 Btu/hour, using landfill gas as the fuel source and each micro-turbine driving 30 kilowatt generator. If the micro-turbines are using the landfill gas or digester gas as a fuel source, they require a written permit. Staff reviewed the SCAQMD inventory for the micro-turbines and found that all 16 micro-turbines use landfill gas as a fuel source.

SCAQMD staff received information from the manufacturer of the micro-turbines that the 3,500,000 Btu per hour micro-turbines operated more efficiently than the older units that were up to 2,975,000 Btu per hour which is the reason for the Btu per hour ceiling limit for this proposed exemption. In an effort to provide equity among different distributed energy generation sources, SCAMD staff is also proposing to restrict the micro-turbines that are eligible for the Rule 222 filing program by allowing micro-turbines, with a maximum heat input capacity 3,500,000 British thermal units (Btu) per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation with the state of California or were in operation prior to date of amendment.

- (b)(2) – The maximum heat input rate would be changed to the rated maximum heat input capacity. Diesel fueled boilers that are located more than 4,000 feet above sea level or more than 15 miles offshore, and maximum NOx emission output of the equipment is less than one pound per day and uses less than 50 gallons (gallons gasoline equivalent (GGE)) of fuel per day and that are in operation prior to the date of PAR 219 adoption would be added to the boilers, process heater or any combustion equipment that has a maximum heat capacity of 2,000,000 Btu per hour exemption. The exemption would not apply to piston type internal combustion engines or turbines. This exemption does not apply whenever there are emissions other than products of combustion, unless the equipment is specifically exempt under another section of this rule, except for food convection ovens that have a rated maximum heat input capacity of 2,000,000 Btu/hour or less and where the VOC emissions from yeast fermentation are less than one pound per day and are exclusively fired on natural gas.

There are five boilers in the district that would meet the conditions proposed in PARs 219 and 222 that are currently subject to Rule 1147. These boilers are located in places where there are no provisions for natural gas, electricity or alternate fuels.

SCAQMD staff has identified 55 permitted food convection ovens in the district that would meet the conditions proposed in PARs 219 and 222.

- (b)(3) – Portable diesel fueled heaters that have a rated maximum heat input capacity of 250,000 Btu per hour or less and are equipped with burner(s) fired on diesel fuel only would be exempted.

SCAQMD staff has identified nine permitted portable diesel heaters in the district that would meet the conditions proposed in PARs 219 and 222 that are currently subject to Rule 1147. Portable diesel fueled heaters are typically used in large areas where comfort heat is required but electricity and natural gas pipe lines are not available. In addition, propane and other gaseous fueled heaters prompt safety concerns should they leak fuel, which is heavier than air and can saturate the immediate area surrounding the heater. The portable diesel fueled heaters are common and can be obtained in variety of ratings (Btu). Based on the review of the SCAQMD database, the rated maximum heat input capacities of the portable diesel fueled heaters universe ranges from 160,000 to 219,000 Btu per hour. All nine of these units were fired on diesel fuel.

- (b)(4) – Portable power pressure washers and hot water or steam washers and cleaners, with a maximum heat input capacity of 500,000 Btu per hour (gross) or less and equipped with a heater or burner that is fueled either by natural gas, methanol, liquefied petroleum gas, or any combination thereof or diesel fuel, and the maximum NO_x emission output of the equipment is less than one pound per day and uses less than 50 gallons (or GGE) of fuel per day would be exempted. The exemption would not apply to piston type internal combustion engines or turbines. Electrically heated burners would be exempted from permit and the Rule 222 filing requirements.

SCAQMD staff has determined that there are currently 258 permitted portable power washers and hot water or steam washers and cleaners in the district and recognizes these units to be small emission sources. The SCAQMD database also shows that 245 of these units were fired on diesel fuel, two units on liquefied petroleum gases, three units on kerosene, and 26 units on a combination of diesel fuel, kerosene and fuel oil. Portable power pressure washers and hot water or steam washers and cleaners are quite popular in cleaning operations as they can be used to wash or steam clean machinery, buildings, pavement, and many other washing or cleaning uses with high-pressure spray. Portable pressure power washers and hot water or steam washers and cleaners normally consist of a reciprocating internal combustion piston-type engine, typically fueled by gasoline, which is used to drive the compressor pump to pressurize the water into a spray or a stream. The portable power pressure washers and hot water or steam washers and cleaners also employ a heater or burner that heats the water before it is dispensed from the equipment. The typical fuel used for the heater or burner is diesel fuel. The portable power pressure washer and hot water or steam washer and cleaner equipment incorporates a rubber hose that extends from the equipment to a spray wand that is equipped with a trigger for the operator to discharge the pressurized spray.

Currently portable power pressure washers and hot water or steam washers and cleaners are not exempt unless they are equipped with a heater or burner that is fired on natural gas. Since the majority of the power pressure washers do not have natural gas fired heaters or burners they do not qualify for the exemption for combustion and heat transfer equipment in Rule 219.

Based on the review of the SCAQMD database, the rated maximum heat input capacities of the entire portable power pressure washers and hot water or steam washers and cleaners universe ranges from 100,000 to 1,500,000 Btu per hour. SCAQMD staff determined that out of the entire universe of portable power washers and hot water or steam washers and cleaners 95 percent of the 271 total units had rated maximum heat input capacities less than 500,000 Btu per hour. Therefore, SCAQMD staff is proposing a 500,000 Btu per hour ceiling.

- (b)(4) – The fuel cell exception would be clarified by adding associated heating equipment, provided that the supplemental heat used is less than 90,000 therms per year.

SCAQMD staff has identified two permitted fuel cells in the district that would meet the conditions proposed in PARs 219 and 222. The SCAQMD database currently shows that both fuel cell use molten carbonate technology that use supplemental heaters to accelerate the heat required to control the heat up phase for the carbonate bed before the fuel cells can be used to produce electrical power generation. Currently, both fuels are in the application phase with District engineers.

SCAQMD staff is proposing to clarify the exemption for fuel cells based on the supplemental heater usage rate of 90,000 therms per year. SCAQMD staff based the 90,000 therms per year on a worst case scenario where the total NO_x emissions for a start-up heater was equivalent to 30 ppm, which is equivalent to 0.0363 lbs per million Btu. The 90,000 therms equate to 326.7 pounds year of NO_x emissions or less than one pound per day, on average.

Subdivision (c) – Structures and Equipment

No change.

Subdivision (d) – Utility Equipment - General

- (d)(10) – The volume of the passive carbon adsorbers without mechanical ventilation would be increased from 55 gallons to 120 gallons. Wastewater treatment plants would be added to the exemption.

SCAQMD staff has had several meetings with local city and county agencies in regard to the use of passive carbon adsorption systems that are used to control hydrogen sulfide (H₂S) odors at truck lines, sewer connections and transfer stations. The exemption would address their concerns.

Subdivision (e) – Glass, Ceramic, Metallurgical Processing and Fabrication Equipment

- (e)(2)(G) – The glass exemption would be expanded to include ceramic materials, such as glass and porcelain in order to clarify that ceramic material including porcelain is covered by this exemption.
- (e)(8) - Laser etching or engraving of metal (excluding stainless steel and alloys containing chromium, nickel, cadmium or lead) would be added to the welding equipment exemption. The exemption would also state that laser cutters used to cut stainless steel or alloys of chromium, nickel cadmium or lead or laser cutters rated more than 400 watts and control equipment venting such equipment would not be included in the exemption. The exemption previously did not include plasma arc-cutting equipment that that were rated 136 amperes or

more. The exemption would now not include any plasma arc-cutting equipment that is used to cut stainless steel.

SCAQMD staff has identified 36 permitted laser cutters or etchers in the district that would meet the conditions proposed in PARs 219 and 222. LASER – Light Amplification by Stimulated Emission of Radiation – is a process where light energy is converted into heat energy and is focused into a point, or laser beam, which is directed onto the working surface of an object. The laser beam of a laser cutting machine melts, burns, vaporizes away or is blown away by a jet of gas which provides a desirable high quality surface finish in materials such as flat sheet metal. There are three types of laser cutters that are used in industrial manufacturing applications:

1. The CO₂ laser is used to cut, bore, and engrave materials such as mild steel, aluminum, stainless steel, titanium, paper, wax, plastics, wood, and fabrics.
2. The neodymium (Nd) laser provides high-energy pulsing low repetition speeds and is typically used for boring.
3. The neodymium yttrium-aluminum-garnet (Nd-YAG) laser, which provides very high-energy pulse, is used for boring, engraving, and trimming operations.

Laser etching or engraving equipment is commonly used on metals, plastics, wood, and any other surface that can be etched or engraved. The laser beam etches or engraves by heating up the surface of the object so that the surface of the material will either vaporize or surface fracture and the heated surface flakes off, resulting in the desired engraving on the surface of the object. Staff has observed several industries that use laser etching or engraving in place of the more conventional mechanical etching and engraving. The laser etching or engraving equipment is offered in many sizes, based on maximum power output, with many of the units being very small and thus is a small emissions source. The emissions inventory for 31 permitted laser engravers and etchers shows three pounds per day of particulate matter, less than 10 microns (PM₁₀). In addition, the five permitted laser cutters shows 1.9 pounds per day of PM₁₀ and combined, laser cutters, engravers and etchers account for 4.9 pounds of PM₁₀ per day. These 36 laser cutters, engravers and etchers do not process certain metals such as stainless steel, or alloyed materials that contain chromium, cadmium, nickel or lead; these metals when subjected to the intense heat of the laser flash off toxic materials. Lasers that process these type metals must go through a complete engineering evaluation before a written permit is considered.

Subdivision (f) – Abrasive Blasting Equipment

No change.

Subdivision (g) – Machining Equipment

(g)(1) – Granulating would be added to the exemption for equipment used exclusively for buffing, polishing, carving, mechanical cutting, drilling, machining, pressing routing, sanding, stamping, surface grinding or turning.

Granulators are used in the plastics industry and are used to granulate plastic products during plastic recycling operations. Granulators have been observed by SCAQMD staff field personnel who report that granulating operations are not a significant source of particulate emissions.

Subdivision (h) – Printing and Reproduction Equipment

- (h)(1) – The printing and related coating and/or laminating equipment exemption would be clarified to include associated air pollution control equipment providing the dryers and curing equipment are exempt from paragraph (b)(2) and that the air pollution control equipment is not required for source specific rule compliance.
- (h)(7) – The exemption for hand application of materials used in printing operations would be clarified to include associated air pollution control equipment, unless the air pollution control equipment is required for source specific rule compliance.

Subdivision (i) – Pharmaceuticals, Cosmetics, Food Processing and Preparation Equipment

- (i)(7) The phrase “all of the product” would be changed to “the entire product” for clarification.
- (i)(9) Equipment used exclusively for packing vitamins would be added to the exemption. The exemption would be clarified to be equipment specific, not facility specific, and would add the provision that the exemption includes waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter, or solutions containing solvents that contain VOCs with more than 25 grams per liter.

SCAQMD staff received a comment letter request that waterborne coating used and vitamins and pharmaceutical tablet be allowed an exemption to permit. Staff concurs and the rule language revisions to (i)(9) and (i)(10) are proposed to address the concerns.

- (i)(10) The exemption would be clarified to be equipment specific, not facility specific, and would add the provision that the exemption includes waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter, or solutions containing solvents that contain VOCs with more than 25 grams per liter.
- (i)(13) – An exemption would be added for charbroilers used for multi-family residential units used by owners/occupants for non-commercial purposes.

Subdivision (j) – Plastics, Composite and Rubber Processing Equipment

No change.

Subdivision (k) – Mixing, Blending and Packaging Equipment

- (k)(1) - The exemption for batch mixers would be clarified to include associated filling equipment.
- (k)(2) - The exemption for mixing and blending of materials would be clarified to include associated filling equipment.
- (k)(4) – “to which powders are added” would be changed to “to which powders may be added” for clarification.
- (k)(5) – An exemption for cosmetics filling stations where the filling equipment is hard piped to the cosmetics mixer or the holding tank feeding the filling equipment provided the mixer and holding tank would be added.
- (k)(8) – The exemption for equipment used exclusively to package sodium hypochlorite-based household cleaning and pool products would be clarified to state that the exemption applies to sodium hypochlorite-based pool products, not to sodium hypochlorite-based household cleaning products.

Subdivision (l) – Coating and Adhesive Process/Equipment

- (l)(6) – Air brushes would be added to the exemptions provided under (l)(6).
(l)(8) – For clarification “hand applications” would replace “hand work.”

Subdivision (m) – Storage and Transfer Equipment

- (m)(7) –Hydraulic oils would be added to the exemption for refined lubricating oils.
(m)(11) – The volumes for exemption for equipment, including tar pots (or tar kettles), used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch would be increased from a maximum holding capacity of less than 600 liters (159 gallons) to a maximum holding capacity of less than 3,785 liters (1,000 gallons).

The SCAQMD database shows 72 permitted asphalt day tankers. Based on the review of the SCAQMD database, the maximum holding capacities of the asphalt day tankers range in size from 830 to 25,000 gallons and have a rated maximum input heat capacity ranging from 100,000 to 1,400,000 Btu/hour. The database also shows that 49 of these units are fired using liquefied petroleum gases, 21 units are fired with propane, 1 unit is fired with natural gas and 1 unit is fired with diesel fuel.

- (m)(23) – An exemption would be added for equipment, including asphalt day tankers, used exclusively for the storage, holding, melting and transfer of asphalt or coal tar pitch, mounted on a motor vehicle, with a maximum holding capacity of 18,925 liters (5,000 gallons) or less.

Tar Pots, also commonly known as tar kettles, are used in roofing construction and repair operations, from residential single-family homes to apartment buildings and office buildings. The purpose of the tar pot is two-fold, one to transport a volume of tar to a jobsite and two, to melt the asphalt or coal tar pitch using an onboard burner that directs heat to the tar continuously to melt the tar and keep it in a molten state. Roofing contractors need to keep the tar in a molten state so it can be removed from the tar pot and directly applied to the working surface. Tar pots normally range in maximum holding capacities and can range from 100 gallons and can be as large as 1,000 gallons. The burners for the tar pots are fired on various fuels such as liquefied petroleum gases and diesel based fuels and can produce maximum heat input capacities from 38,000 Btu per hour up to 2,400,000 Btu per hour.

The SCAQMD database currently shows 163 permitted tar pots. Based on the review of the SCAQMD database, the staff found that the maximum holding capacities of the tar pots range from 200 to 1,665 gallons and the rated maximum heat input capacities range from 38,188 to 2,400,000 Btu per hour. The SCAQMD database also shows that 104 of these units are fired on liquefied petroleum gases, 52 units are fired on propane, two units are fired on diesel fuel, and five units show an undeclared fuel source.

Subdivision (n) – Natural Gas and Crude Oil Production Equipment

No change.

Subdivision (o) – Cleaning

- (o)(4) – The exemption for hand application of solvents for cleaning purposes would be clarified to include associated air pollution control equipment, unless the air pollution control equipment is required for source specific rule compliance.

Subdivision (p) – Miscellaneous Process Equipment

- (p)(10) – Carpet and paper shearing would be added to the paper shredding exemption.

SCAQMD staff is proposing to clarify that carpet shearing machines and associated control equipment are exempt. This equipment is proposed to be exempt because the material processed from the shearing operations is larger than PM₁₀ (particulate matter 10 microns in size or larger) and is not considered to be dust.

- (p)(22) – An exemption for equipment used to recycle aerosol cans by puncturing the can in an enclosed system which is vented through an activated carbon filter would be added. This exemption would only apply to aerosol recycling systems where the product within the aerosol can recycled would be from aerosol cans used as part of their operation at the facility or facilities under common ownership.

Aerosol paint cans and aerosol solvent cans such as engine degreasers, brake cleaners, and electrical component cleaners are very popular and convenient sources for small painting and repair operations that require application of solvents. Both aerosol types are frequently used in plants as well as out in field to perform routine maintenance and repair operations for various types of equipment. These small aerosol cans, typical in sizes from 12 fluid ounces to approximately 18 fluid ounces, are easily carried in the pockets of workers, which has promoted their popularity in industrial uses. However, when the aerosol cans are emptied, workers typically dispose the empty can in a common refuse container. The emptied aerosol cans still retain a small amount of residual paint or solvent and propellant inside and presents an environmental concern when the empty can is disposed.

Several facilities have been using the Aerosolv Aerosol Can Disposal Recycling System to recycle the remaining content left inside the empty aerosol can. The Aerosolv recycling system has two components, the press and the filter, and these two components are installed onto a common 30 to 55 gallon drum container lid. The press simply threads into the two-inch bung fitting while the filter threads into the ¾ inch bung fitting. The filter contains an activated carbon canister that adsorbs the VOCs that would otherwise emit from the drum to the atmosphere. The press is used by an operator who places an aerosol can in the press by inverting the aerosol can so the spray head points downward, into the sleeve. The securing clamp is then adjusted to secure the aerosol can firmly, and then the operator pushes down on the lever which then drives a punch pin into the dome area of the aerosol can thus allowing the contents to discharge inside the drum. The depressurized aerosol is then stockpiled for metal recycling. The Aerosolv Aerosol Can Disposal Recycling System is the only aerosol can recycling technology of its type and is certified by the U.S. EPA's Environmental Technology Verification Program. This program is described by the U.S. EPA as a *"Program [that] verifies the performance of innovative technologies that have the potential to improve protection of human health and the environment."*

Subdivision (q) – Agricultural Sources

No change.

Subdivision (r) – Registered Equipment and Filing Program

No change.

Subdivision (s) – Exemptions

No change.

Subdivision (t) – Recordkeeping

No change.

Subdivision (u) – Compliance Date

No change.

Additional changes would be made to improve readability.

PAR 222**Subdivision (a) – Purpose**

No change.

Subdivision (b) – Applicability

- Language would be added requiring that owners/operators authorized to operate emission sources pursuant to this rule would operate those emission sources in compliance with any and all operating conditions imposed by the SCAQMD.
- The phrase “and produce more than one pound of NO_x emissions per day” would be added to the boiler or steam generators and process heaters in Table I.
- The following sources/equipment would be added to Table I:
 - Asphalt day tankers, heated and unheated, that have a maximum capacity greater than 159 gallons but no more than 5,000 gallons and equipped with a demister and equipped with burner(s) that fire exclusively on liquefied petroleum gas (LPG);
 - Asphalt pavement heaters used for road maintenance and new road construction;
 - Diesel-fueled boilers that have a rated maximum heat input capacity of no more than 2,000,000 Btu/hour and are located more than 4,000 feet above sea level or more than 15 miles offshore and are in operation prior to date of amendment;
 - Food convection ovens that have a maximum heat input capacity of no more than 2,000,000 Btu/hour and are fired exclusively on natural gas where the VOC emissions from yeast fermentation are less than one pound per day;
 - Fuel cells, which produce electricity in an electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies and are equipped with a heater producing supplemental heat with a rated heat input capacity 90,000 therms per year or less;
 - Micro-turbines, with a maximum heat input capacity of 3,500,000 British thermal units (Btu) per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation with the state of California or were in operation prior to date of amendment;
 - Portable diesel fueled heaters, with a rated maximum heat input capacity of no more than 250,000 Btu/hr;
 - Portable power pressure washers and hot water or steam washers and cleaners with heaters or burners that have a rated maximum heat input capacity of no more than 500,000 Btu/hour and use no more than 50 gallons of fuel per day.;

- Tar pots with a maximum storage capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and equipped with burner(s) that fire on liquefied petroleum gases; and
- Piston type internal combustion engines, with a manufacturer's rating of 100 brake horsepower or less that are used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a one half mile radius.

Subdivision (c) – Definitions

Definitions for asphalt day tankers, asphalt pavement heaters, diesel fuel boilers, food convection ovens, fuel cells, micro-turbines, portable diesel fueled heaters, power pressure washers and tar pots would be added.

Subdivision (d) – Requirements

- Owners and operators of sources subject to PAR 222 would be required to comply with all operating conditions imposed on the emissions source.
- The requirement to periodically submit updated information would be modified to require that on January 1, and each year thereafter, records be kept and made available to the SCAQMD upon request to provide operations data and any updated information on the emission sources or equipment, applicable to PAR 222.
- The requirement to maintain a copy of the filing receipt for all emissions sources and equipment applicable to PAR 222 would be clarified to be for the “life of the emission sources or equipment and made available to the Executive Officer upon request.”
- The requirement to maintain records sufficient to verify the description of the emissions sources or equipment would also require data necessary to estimate output of emission sources, and records used to demonstrate compliance with operating conditions and with all applicable rules and regulations. The records would need to be maintained for five years and made available to the Executive Officer upon request.
- The condition not to remove any air pollution control equipment associated with applicable equipment subject to PAR 222 would be clarified to state “unless it can be demonstrated that it can” be replaced with air pollution control equipment which will reduce emissions at equal to or greater efficiency that the prior unit. The replacement air pollution control equipment would also need to be first approved in writing by the Executive Officer.
- The statement “failure to comply with the provisions set forth in subparagraphs (d)(1)(A), (B), (C), (E), and (F) shall constitute a violation” of PAR 222 would be added.

Subdivision (e) – Compliance Dates

- The statement “failure to comply with the provisions set forth in subparagraphs (b)(1), (b)(2), (e)(1) through, (e)(3), shall constitute a violation” of PAR 222 would be added.

ALTERNATIVES

The Draft EA will discuss and compare alternatives to the proposed project as required by CEQA and by SCAQMD Rule 110. Alternatives must include realistic measures for attaining the basic objectives of the proposed project and provide a means for evaluating the comparative merits of each alternative. In addition, the range of alternatives must be sufficient to permit a reasoned choice and it need not include every conceivable project alternative. The key issue is whether the selection and discussion of alternatives fosters informed decision making and public

participation. A CEQA document need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative.

SCAQMD Rule 110 does not impose any greater requirements for a discussion of project alternatives in an environmental assessment than are required for an Environmental Impact Report under CEQA. Alternatives will be developed based in part on the major components of the proposed rule. The rationale for selecting alternatives rests on CEQA's requirement to present "realistic" alternatives; that is alternatives that can actually be implemented. CEQA also requires an evaluation of a "No Project Alternative."

SCAQMD's policy document Environmental Justice Program Enhancements for fiscal year (FY) 2002-03, Enhancement II-1 recommends that all SCAQMD CEQA assessments include a feasible project alternative with the lowest air toxics emissions. In other words, for any major equipment or process type under the scope of the proposed project that creates a significant environmental impact, at least one alternative, where feasible, shall be considered from a "least harmful" perspective with regard to hazardous air emissions.

The Governing Board may choose to adopt any portion or the entirety of any alternative presented in the EA. The Governing Board is able to adopt any portion or the entirety of any of the alternatives presented because the impacts of each alternative will be fully disclosed to the public and the public will have the opportunity to comment on the alternatives and impacts generated by each alternative.

C H A P T E R 2

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Environmental Checklist and Discussion

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	Proposed Amended Rules 219 and 222
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive, Diamond Bar, CA 91765
Rule Contact Person:	Don Hopps, (909) 396-2334
CEQA Contact Person:	James Koizumi, (909) 396-3234
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive, Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	PAR 219 would provide an exemption to a written permit or filing requirements for certain additional equipment, processes, or operations that produce small amounts of air contaminants. Sources added to PAR 219 would not be issued operating parameters from the SCAQMD. PAR 222 would provide access to a simple and efficient filing system for certain additional low-emitting emission sources. Sources added to PAR 222 would continue to be subject to existing written permit conditions. SCAQMD staff is also proposing to add some types of equipment to both PAR 219 (to exempt them from permit requirements) and PAR 222 (to track equipment by imposing filing requirements). Equipment added to both PARs 219 and 222 include certain types of equipment currently regulated by Rule 1110.2 and Rule 1147: portable power pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, diesel boilers, and remote two-way radio transmission power sources. Sources that would be added to PAR 219, but not PAR 222 include air pollution control devices for Rule 219 equipment; cosmetic filling stations and related filling equipment; laser cutting, etching and engraving equipment; and aerosol can recycling systems. Text would also be added to PAR 219 and PAR 222 to clarify the intent of existing provisions and the enforceability of the conditions imposed by PAR 222. Significant adverse operational air quality impacts will be analyzed further in the Draft Environmental Assessment. No other significant adverse impacts were identified in the Initial Study.
Surrounding Land Uses and Setting:	Industrial, institutional and commercial facilities with affected low emitting equipment.
Other Public Agencies Whose Approval is Required:	Not applicable

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact issues have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project. An explanation relative to the determination of impacts can be found following the checklist for each area.

- | | | |
|---|--|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Population and Housing |
| <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Solid/Hazardous Waste |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Transportation./Traffic |
| <input type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input checked="" type="checkbox"/> Mandatory Findings |

DETERMINATION

On the basis of this initial evaluation:

- ☐ I find the proposed project, in accordance with those findings made pursuant to CEQA Guideline §15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts has been prepared.
- ☐ I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.
- ☒ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.
- ☐ I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1)has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: October 17, 2012

Signature: _____

Steve Smith

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rules, and Area Sources

DISCUSSION AND EVALUATION OF ENVIRONMENTAL IMPACTS

The proposed project would include adding specified categories of equipment or operations to Rule 219, which would exempt them from written permit requirements as explained in Chapter 2. Some equipment would be added only to Rule 219 to codify current permitting practice, that is, because they have low emissions they are currently not treated as equipment requiring a permit. These equipment categories include: air pollution control devices for Rule 219 equipment not required for source specific rule compliance; filling equipment associated with Rule 219 equipment; ceramic material furnaces (including glass and porcelain) with a capacity less than 450 kilograms; etching and engraving equipment; multi-family residence charbroilers; cosmetic filling stations; air brushes; and equipment used for the storage and transfer of hydraulic oils.

SCAQMD staff is also proposing to add equipment to PAR 219 that is currently subject to written permit requirements because staff has identified them as low emitting equipment. Adding these categories of equipment to PAR 219 provides some regulatory and administrative relief to equipment owners. Equipment that would be exempt from written permit requirements include: odor control passive carbon adsorbers with a maximum vessel capacity of no more than 120 gallons; ceramic material furnaces; granulating equipment; vitamin packing equipment provided usage is less than one gallon or 22 gallons per month; filling equipment associated with Rule 219 equipment, carpet and paper shearing machines, and aerosol can recycling systems. Adding these categories of equipment to PAR 219 would not be expected to generate emission impacts primarily because they generate low levels of emissions, typically less than one pound per day, or do not generate any emissions. For example, carpet and paper shearing operations do not generate any measurable PM₁₀ or PM_{2.5} emissions, so exempting them from written permit requirements would have no effect. Aerosol can recycling systems are closed systems vented to activated carbon and, therefore, would not generate any quantifiable emissions. The size of the carbon adsorber subject to exemption is being increased from 55 gallons to 120 gallons as these units have no mechanical ventilation and there is no additional permit or control requirements for this equipment. These units are being installed in situations where control is not required (voluntary installations for operator convenience). There will not be any increase in emissions as there are currently no additional permit or control requirements for this equipment. Granulators are used in the plastics industry and are used to granulate plastic products during plastic recycling operations. Granulators have been observed by SCAQMD staff field personnel who report that granulating operations are not a significant source of particulate emissions.

The proposed project includes adding some categories of equipment to both PAR 219 and PAR 222, which means that affected equipment would be subject to filing system requirements. Equipment categories added to both PARs 219 and 222 include: fuel cells and micro-turbines (with a maximum heat capacity of 3,500,000 Btu per hour or less with a cumulative power output of two megawatts from all such units per facility). Because these equipment are considered to be low emitting equipment and they would continue to be subject to existing permit conditions and other regulatory requirements, no environmental impacts are anticipated from adding these categories of equipment to PARs 219 and 222. For example, fuel cells are closed units, so no or very low emissions from these sources would continue to occur regardless of whether or not they are subject to written permit system requirements or filing system requirements. Gas turbines, including micro-turbines, would continue to be subject to best available control technology (BACT) through the state distributed generation certification.

Finally, the proposed project includes adding some categories of stationary source equipment currently subject to Rules 1110.2 and 1147 to both PAR 219 and PAR 222, but the categories of equipment from these two rules would no longer be subject to source-specific emission control requirements. Equipment affected by the proposed project that is currently subject to Rule 1110.2 includes piston-type internal combustion engines with a manufacturer's rating of 100 brake horsepower or less that is used exclusively for electrical generation at remote two-way radio transmission towers are currently regulated by Rule 1110.2. Under existing Rule 1110.2, affected remote internal combustion engines would likely have complied with emission reduction requirements by replacing existing diesel-fueled engines with engines that operate using clean fuels (e.g., natural gas or propane) or installing aftertreatment emission control technology.

Equipment affected by the proposed project that is currently subject to Rule 1147 includes potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters and diesel boilers. Under existing Rule 1147, affected equipment would likely have complied by replacing diesel-fueled equipment with equipment that operate using clean fuels (e.g., natural gas or propane) or being retrofitted with low NO_x burners.

By adding categories of equipment currently subject to Rule 1147 or Rule 1110.2 into Rules 219 and 222 and exempting the affected equipment from the source-specific emission control requirements, construction activities associated with the compliance options would no longer occur. Consequently, environmental impacts associated with construction activities to bring affected equipment into compliance would no longer occur.

Since affected Rule 1147 and Rule 1110.2 equipment categories added to Rules 219 and 222 would no longer be required to comply with the applicable NO_x emission control requirements, the proposed project would result in future projected NO_x emission reductions foregone. Based on the preceding information, potential adverse environmental impacts would likely occur primarily as a result of adding equipment categories currently subject to Rule 1147 and Rule 1110.2 to PARs 219 and 222.

Staff evaluated the possibility that by adding equipment to PARs 219 and 222, thus, removing written permitting requirements, owners/operators might be motivated to add additional equipment that would otherwise not be installed because of the administrative and cost burdens of obtaining a written permit. It is not expected that adding equipment categories to PARs 219 and 222 would result in greater than average numbers of affected equipment being installed per year (36) for the following reasons. There are a number of business decisions that drive whether or not the business owner will purchase new or additional equipment besides the administrative and cost burdens of obtaining written SCAQMD permits. For example, a major driver will be the condition of the local economy. In recessionary times, there is a reduced demand for products, so it is unlikely the business owner would purchase additional equipment. Alternatively, during good economic times, a business owner may purchase additional equipment if there is sufficient demand for the product and there is a potential for greater profits, regardless of written permit burdens. In other words, the major factor in determining whether to add equipment is demand and not the cost to permit the equipment. Further most equipment would typically be located inside existing commercial or industrial facilities. For two-way radio transmission sources, it is expected that they will be installed according to future demand. Staff was unable to identify any information that indicates that future demand would be greater than the demand for this type of equipment over the past twelve years.

Staff evaluated the SCAQMD's permit database since the year 2000, which showed that, on average, approximately 36 units per year of equipment that is proposed to be added to PARs 219 and 222 have been permitted each year. This range covers the periods before the adoption of the current emission control requirements in Rule 1110.2 (February 1, 2088) and Rule 1147 (September 9, 2011). Equipment affected by the proposed project is unlikely to create significant construction impacts because the affected equipment is typically small and could be dropped into place with minimal or no construction required. Also, operational emissions would be less than one pound per day.

Even if additional equipment is added at a facility with equipment affected by the proposed project, it is unlikely that impacts would occur because the affected equipment is typically small and could be dropped into place with minimal or no construction emissions. Further equipment would typically be located inside existing commercial or industrial facilities. For two-way radio transmission sources, it is expected that they will be installed according to future demand. Staff was unable to identify any information that indicates that future demand would be greater than demand this type of equipment has been over the past 12 years (see Table 2-3).

For all of the reasons identified above, the following environmental analyses focus primarily on the potential adverse environmental impacts from adding Rule 1147 and Rule 1110.2 sources to PARs 219 and 222.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
I. AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

Discussion

I. a), b), c), & d) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the visible characteristics or placement of the affected equipment.

Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission control equipment. The affected Rule 1147 equipment would have been required to be retrofitted with low NOx burners or replaced with equipment that does not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NOx burners infeasible. Therefore, diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane fueled). The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement of existing equipment retrofit of burners or installation of aftertreatment emission control equipment. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Although previous prepared CEQA documents for Rules 1110.2 and 1147 did not identify significant adverse aesthetic impacts from affected sources, eliminating the Rule 1110.2 and Rule 1147 compliance requirements for affected sources would result in fewer construction activities, and therefore, reduce even further the potential to generate adverse aesthetic impacts. In addition, the affected equipment is located at existing commercial or industrial facilities. Therefore, based on the reasons above, affected Rule 1147 and Rule 1110.2 sources would have no aesthetic impacts compared to the existing setting.

Since PARs 219 and 222 are not expected to alter the visible characteristics or placement of the affected equipment, the proposed project is not expected to create any significant adverse effects on scenic vistas; would not add new substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; would not add new substantial degradation to the existing visual character or quality of the site and its surroundings.

The proposed project has no provisions that require operations of affected equipment at night. If any lighting is installed at affected facilities it is for reasons other than whether or not a piece of equipment is subject to permit or filing requirements. Therefore, the proposed project is not expected to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Based upon the above considerations, the proposed project would not create new aesthetics impacts. Since no significant aesthetics impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FOREST RESOURCES. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104 (g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Project-related impacts on agriculture and forest resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined in Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code § 51104 (g)).

- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

Discussion

II. a), b), c), & d) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the physical characteristics or placement of the affected equipment.

PARs 219 and 222 would exempt some Rule 1147 and Rule 1110.2 sources that either would have future or existing compliance requirements that would have necessitated replacing equipment or burners or installing aftertreatment emission control equipment. The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement or retrofit of equipment or aftertreatment emission control equipment construction. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Therefore, affected Rule 1147 and Rule 1110.2 sources would have no agricultural and forest resource impacts compared to the existing setting, because affected equipment are located at existing commercial or industrial facilities. Therefore, PARs 219 and 222 would have no adverse agricultural or forest resource impacts.

Since PARs 219 and 222 would not affect the placement of affected equipment, the proposed project is not expected to result in converting farmland to non- agricultural use; or conflict with existing zoning for agricultural use, or a Williamson Act contract. Similarly, it is not expected that PARs 219 and 222 would conflict with existing zoning for, or cause rezoning of, forest land; or result in the loss of forest land or conversion of forest land to non-forest use. Consequently, the proposed project would not create any significant adverse agriculture or forestry impacts. Since no significant agriculture or forestry resources impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Significance Criteria

To determine whether or not air quality impacts from the proposed project may be significant, impacts will be evaluated and compared to the criteria in Table 2-1. If impacts exceed any of the criteria in Table 2-1, they will be considered further in the Draft EA. As necessary, all feasible mitigation measures will be identified in the Draft EA and implemented to reduce significant impacts to the maximum extent feasible.

Table 2-1
SCAQMD Air Quality Significance Thresholds

Mass Daily Thresholds ^a		
Pollutant	Construction ^b	Operation ^c
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
SOx	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
GHG	10,000 MT/yr CO2eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants ^d		
NO2 1-hour average annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM10 24-hour average annual average	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation) 1.0 µg/m ³	
PM2.5 24-hour average	10.4 µg/m ³ (construction) ^e & 2.5 µg/m ³ (operation)	
SO2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99 th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 µg/m ³ (state)	
CO 1-hour average 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day Average Rolling 3-month average Quarterly average	1.5 µg/m ³ (state) 0.15 µg/m ³ (federal) 1.5 µg/m ³ (federal)	

^a Source: SCAQMD CEQA Handbook (SCAQMD, 1993)

^b Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

^c For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

^d Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

^e Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million $\mu\text{g}/\text{m}^3$ = microgram per cubic meter \geq = greater than or equal to
MT/yr CO₂eq = metric tons per year of CO₂ equivalents $>$ = greater than

Discussion

III. a) The initial evaluation of PARs 219 and 222 indicates that they have the potential to result in operational NO_x emission reductions foregone, which is greater than the SCAQMD operational NO_x significance threshold of 55 pounds per day. While significant, the NO_x emission reductions foregone are not expected to conflict with or obstruct implementation of the applicable air quality control plan because the 2007 AQMP demonstrates that the effects of all existing rules, in combination with implementing all existing and proposed AQMP control measures would bring the district into attainment with all national and state ambient air quality standards. Similarly, the Draft 2012 AQMP demonstrates attainment of the federal 24-hour PM_{2.5} standard. Although NO_x is a PM_{2.5} precursor pollutant, the NO_x emission reductions foregone are not expected to hinder attainment of the federal 24-hour PM_{2.5} standard, and therefore will not be further analyzed in the Draft EA.

III. b) and f) *Criteria Pollutants*

Construction Impacts

PARs 219 and 222 would not require any additional construction to install air pollution control equipment. As explained below, with the exception of equipment currently regulated by Rules 1110.2 and 1147, equipment added to PARs 219 and 222 would continue to be subject to existing applicable rule requirements or permit conditions. Most of the affected equipment would be constructed in the same fashion as under the existing permit system. The two exceptions to this conclusion are the piston type internal combustion engines with a manufacturer's rating of 100 brake horsepower or less that is used exclusively for electrical generation at remote two-way radio transmission towers, which are currently regulated by Rule 1110.2; and Rule 1147 equipment (affected pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers). Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission control equipment. The affected Rule 1147 equipment would have been needed to be retrofitted with low NO_x burners or replaced with equipment that did not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NO_x burners infeasible. Therefore, diesel fueled pressure washers, portable diesel heaters and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane fueled pressure washers, portable heaters and boilers). Criteria emissions from construction were estimated in the 2007 Final EA for PAR 1110.2 (SCAQMD No. 280307JK, December 2007) and the 2008 Final EA for PAR 1147 (SCAQMD No. 081015JJI, State Clearinghouse No: 2008101082, December 2008). Although construction emissions estimated in earlier CEQA documents from affected equipment that would be incorporated in to PARs 219 and 222 would not occur, no credit will be taken for the construction emissions that would no longer occur. Therefore, construction air quality impacts will not be further analyzed in the Draft EA.

Operational Impacts

Equipment added to PAR 219 and/or PAR 222 and their operational air quality effects are presented in Table 2-2. Most of the affected equipment would be operated in the same fashion as under the existing permit system. The two exceptions to this are the piston type internal combustion engines with a manufacturer's rating of 100 brake horsepower or less that are used exclusively for electrical generation at remote two-way radio transmission towers, which are currently regulated by Rule 1110.2; and Rule 1147 equipment (affected potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers).

To comply with Rule 1110.2 requirements, remote internal combustion engines would have been replaced with engines that operate on propane or retrofitted with aftertreatment emission control technology. Similarly, to comply with Rule 1147 requirements, power pressure washers, asphalt day tankers, and asphalt tar pots would likely have been required to replace existing burners with low NOx burners or replace equipment with equipment that does not is not fueled by diesel. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NOx burners infeasible. Therefore, diesel fueled pressure washers, portable diesel heaters and diesel boilers would likely to have been replaced with alternative-fueled equipment (natural gas or propane).

Natural gas fueled equipment connected to natural gas pipes would have eliminated some diesel fuel delivery trips. Propane and liquefied natural gas (LNG) fueled equipment would have still required fuel delivery trips. Equipment retrofitted with aftertreatment may have required catalyst replacement trips, CEMS calibration trips, etc. Since it is not known what owner/operators would have done to comply with Rule 1147 or Rule 1110.2, it is difficult to quantify differences in fuel consumed by the affected sources, delivery trips and additional monitoring trips. Since trips associated with these compliance activities are routine but infrequent, any changes in the number of vehicle trips on a daily basis between complying with Rule 1147 or Rule 1110.2, or continuing existing operations would not likely be different compared to the baseline vehicle trips per day. There may be differences between trips required to comply with Rule 1147 or Rule 1110.2 when compared to existing operations, but because it is not known how owner/operators would have complied with Rule 1147 or Rule 1110.2, it would be speculative to estimate differences between baseline compliance activity vehicle trips and vehicle trips associated with rule compliance. Since any changes in the number of vehicle trips per day are considered to be speculative, this impact will not be considered further.

The primary effect of the proposed project, however, is related to operational emissions. A list of equipment categories with potential emission reductions foregone that would be added to PARs 219 and 222 is presented in Table 2-3. Because of the number of affected units (551 sources), future projected NOx emission reductions forgone may exceed the NOx significance threshold of 55 pounds per day. Because potential operational NOx emission reductions foregone may exceed the applicable NOx significance threshold, this potential impact will be evaluated further in the Draft EA.

Table 2-2
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
<u>Asphalt day tankers, heated and unheated, that have a maximum capacity greater than 159 gallons but no more than 5,000 gallons and equipped with a demister and a burner that fire exclusively on liquefied petroleum gas (LPG)</u>	Added to Table I	Added to (m)(23)	Rule 1147 (NOx)	There are 58 existing units affected by this provision with NOx emissions foregone since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1)
<u>Asphalt pavement heaters used for road maintenance and new road construction.</u>	Added to Table I	Removed from (a)(4) to (a)(5)	Rule 219 (a)(4)(NOx)	No emissions impact – equipment category moved from Rule 219 to PAR 222.
<u>Diesel fuel boilers that have a rated maximum heat input capacity of no more than 2,000,000 Btu/hour and are located more than 4,000 feet above sea level or more than 15 miles offshore and in operation prior to the date of adoption.</u>	Added to Table I	Added to (b)(2)	Rule 1147 (NOx)	There are five existing units affected by this provision with NOx emissions foregone since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1)
<u>Food convection ovens that have a rated maximum heat input capacity of no more than 2,000,000 Btu/hour and are exclusively fired exclusively on natural gas and where the VOC emissions from yeast fermentation are less than one pound per day.</u>	Added to Table I	Added to (b)(2)	Rule 1147 (NOx)	There are 55 existing units affected by this provision with NOx emissions foregone since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1)
<u>Fuel cells, which produce electricity in a electro-chemical reaction and use phosphoric acid, molten carbonate, proton exchange membrane, or solid oxide technologies, and are equipped with a heater producing supplemental heat with a rated heat input capacity of 90,000 therms per year or less</u>	Added to Table I	Added to b(5)	Rule 1150.1 (landfill gas)	No emissions impact - these are closed units and there is no difference in emissions between permitted and unpermitted equipment
<u>Gas turbines, including micro-turbines, with a maximum heat input capacity of 3,500,000 British thermal units (Btu) per hour or less, provided that the cumulative power output of all such engines at a facility is less than two megawatts, and that the engines are certified at the time of installation with the state of California or were in operation prior to date of amendment.</u>	Added to Table I	Added to b(1)	Rule 1150.1 (landfill gas)	No emissions impact - language requiring DG certification is equivalent to BACT

Table 2-2 (continued)
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
<u>Portable diesel fueled heaters, with a rated maximum heat input capacity of no more than 250,000 Btu/hour.</u>	Added to Table I	Added to b(4)	Rule 1147 (NOx)	There are nine existing units affected by this provision with NOx emissions since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1)
<u>Portable power pressure washers and hot water or steam washers and cleaners with heaters or burners that have a rated maximum heat input capacity of no more than 500,000 Btu/hour and use no more than 50 gallons of fuel per day.</u>	Added to Table I	Added to b(4)	Rule 1147 (NOx)	There are 258 existing units affected by this provision with NOx emissions since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1)
<u>Tar pots with a maximum storage capacity greater than 600 liters (159 gallons) but no more than 3,785 liters (1000 gallons) and equipped with burner(s) that fire on liquefied petroleum gases.</u>	Added to Table I	Added to m(11)	Rule 1147 (NOx), Rule 471 (VOC)	There are 148 existing units affected by this provision with NOx emissions foregone since these units would not need to comply with new or in-use requirements of Rule 1147 (c)(1)
<u>Piston type internal combustion engines with a manufacturer's rating of 100 brake horsepower or less that is used exclusively for electrical generation at remote two-way radio transmission towers where no utility, electricity or natural gas is available within a ½ mile radius and that were in operation prior to the date of amendment.</u>	Added to Table I	Added to (b)(1)	Rule 1110.2 (NOx)	There are 16 units affected by this provision with NOx emissions foregone since these units would not need to comply with new or in-use requirements of Rule 1110.2. NOx is the only affected pollutant
<u>Passive carbon adsorbers, with a maximum vessel capacity of no more than 120 gallons, using no without mechanical ventilation with a volume of 555 gallons or less, used exclusively for foul air odor control from at wastewater treatment plants or sanitary-sewer collection systems, including such as sanitary sewers, lines, manholes and pump stations.</u>	Not applicable	Added to (d)(10)	No source-specific requirements	There will not be any increase in emissions as there are currently no additional permit or control requirements for this equipment.

Table 2-2 (continued)
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
Crucible furnaces, pot furnaces, or induction furnaces with a capacity of 450 kilograms (992 pounds) or less each, where no sweating or distilling is conducted and where only the following materials are poured or held in a molten state and control equipment exclusively venting the equipment: <u>Glass Ceramic materials, including glass and porcelain</u>	Not applicable	Added to (e)(2)(G)	Currently treated as exempt	No emissions impact - this is a clarification
Welding equipment, oxygen gaseous fuel-cutting equipment and control equipment venting such equipment, <u>or laser etching/engraving of metal (excluding metal containing chromium, cadmium or lead)</u> . This exemption does not include plasma arc-cutting equipment <u>or laser cutting equipment</u> that is used to cut stainless steel <u>or alloys containing chrome, nickel, or cadmium</u> , <u>or laser cutters that are rated 136 amperes or more</u> <u>more than 400 watts and control equipment venting such equipment</u> .	Not applicable	Added to (e)(8)	Currently treated as exempt	No emissions impact - this is a clarification that ensures no toxic materials are involved
Equipment used exclusively for buffing (except tire buffers), polishing, carving, mechanical cutting, drilling, <u>granulating</u> , machining, pressing, routing, sanding, stamping, surface grinding or turning provided that any lubricants, coolants, or cutting oils used have 50 grams or less of VOC per liter of material or a VOC composite partial pressure of 20 mm Hg or less at 20 °C (68 °F) and control equipment exclusively venting such equipment. This exemption does not include asphalt pavement grinders.	Not applicable	Added to (g)(1)	Currently treated as exempt	No emissions impact - This is a clarification to ensure a consistent approach among compliance staff

Table 2-2 (continued)
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
Printing and related coating and/or laminating equipment and associated dryers and curing equipment, <u>as well as associated air pollution control equipment</u> , provided that such dryers and curing equipment are exempt pursuant to paragraph (b)(2), <u>and that air pollution control equipment is not required for source specific rule compliance</u> , are exempt pursuant to paragraph (b)(2)...	Not applicable	Added to (h)(1)	Currently treated as exempt	No emissions impact - this is a clarification that if a piece of air pollution control equipment is not required it does not need a permit
Hand application of materials used in printing operations including but not limited to the use of squeegees, screens, stamps, stencils, and any hand tools, <u>and associated air pollution control equipment, unless air pollution control equipment is required for source specific rule compliance</u>	Not applicable	Added to (h)(7)	Currently treated as exempt under	No emissions impact - this is a clarification that if a piece of air pollution control equipment is not required it does not need a permit
Equipment used exclusively for tableting, <u>or packaging vitamins</u> , or coating vitamins, herbs, or dietary supplements provided that the facility equipment <u>uses waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter or solutions containing solvents that contain VOCs with more than 25 grams per liter provided that the usage is no more less than one gallon per day or twenty-two (22) gallons per month of VOC containing solvents, and control equipment used exclusively to vent such equipment.</u>	Not applicable	Added to (i)(9)	Currently treated as exempt under	No emissions impact - this is a clarification that packaging vitamins is exempt and allows use of exempt waterborne solutions in this operation
Equipment used exclusively for tableting or packaging pharmaceuticals and cosmetics, or coating pharmaceutical tablets, provided that the facility equipment <u>uses waterborne solutions that contain a maximum VOC content of no more than 25 grams per liter, or solutions containing solvents that contain VOCs with more than 25 grams per liter provided that the usage is no more less than one gallon per day or twenty-two (22) gallons per month of VOC containing solvents, and control equipment used exclusively to vent such equipment.</u>	Not applicable	Added to (i)(10)	Currently treated as exempt under	No emissions impact - this is a clarification that allows use of exempt waterborne solutions in this operation; the use of waterborne solutions are currently exempt

Table 2-2 (continued)
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
<u>Charbroilers are exempt for multi-family residential units only if used by the owner or occupant of such dwelling for non-commercial purposes.</u>	Not applicable	Added to (i)(12)	Currently treated as exempt	No emissions impact - this is a clarification that owner/occupants can barbeque at their residence
Batch mixers, which have a brimful capacity of 55 gallons or less (7.35 cubic feet) and control equipment exclusively venting the equipment and <u>associated filling equipment.</u>	Not applicable	Added to (k)(1)	Currently treated as exempt	No emissions impact - clarification - filling equipment does not produce any quantifiable emissions in this application
Equipment used exclusively for mixing and blending of materials where no VOC containing solvents are used and no materials in powder form are added and <u>associated filling equipment</u>	Not applicable	Added to (k)(2)	Currently treated as exempt	No emissions impact - clarification - filling equipment does not produce any quantifiable emissions in this application
<u>Cosmetics filling stations where the filling equipment is hard piped to the cosmetics mixer or the holding tank feeding the filling equipment provided the mixer and holding tank is exempt under this rule</u>	Not applicable	Added to (k)(5)	Currently treated as exempt	No emissions impact - clarification - filling equipment does not produce any quantifiable emissions in this application
Equipment used exclusively for the packaging of sodium hypochlorite-based household cleaning or <u>sodium hypochlorite-based</u> pool products and control equipment exclusively venting the equipment	Not applicable	Added to (k)(8)	Currently treated as exempt	No emissions impact - clarification on sodium hypochlorite
Coating or adhesive application or laminating equipment such as air, airless, air-assisted airless, high volume low pressure (HVLP), <u>air brushes</u> and electrostatic spray equipment, and roller coaters, dip coaters, vacuum coaters, flow coaters and spray machines provided that	Not applicable	Added to (l)(6)	Currently treated as exempt	No emissions impact - clarification that air brushes are also exempt

Table 2-2 (concluded)
PAR 219 and/or PAR 222 Provisions and Effects

Description	PAR 222	PAR 219	Equipment is Currently Subject to:	Emissions Impact Relative to Baseline
Equipment used exclusively for the storage and transfer of refined lubricating or <u>hydraulic oils</u>	Not applicable	Added to (m)(7)	Rule 463 (VOC)	No emissions impact - clarification - hydraulic oils are refined oils
Hand application of solvents for cleaning purposes including but not limited to use of rags, daubers, swabs, and squeeze bottles as well as associated air pollution control equipment, <u>unless air pollution control equipment is required for source specific rule compliance.</u>	Not applicable	Added to (o)(4)	Rule 1171 (VOC)	No emissions impact - this is a clarification that if a piece of air pollution control equipment is not required it does not need a permit
Paper shredding, <u>carpet and paper shearing</u> and as well as associated conveying systems, baling equipment, and control equipment venting such equipment.	Not applicable	Added to (p)(10)	Rule 404 (PM), Rule 405 (PM)	No emissions impact - carpet shearing does not produce quantifiable PM 2.5 or PM 10
<u>Equipment used to recycle aerosol paint cans by puncturing the can in an enclosed system which is vented through an activated carbon filter. This exemption shall only apply to aerosol recycling systems where the product within the aerosol can recycled was from aerosol cans used as part of their operation at the facility or facilities under common ownership</u>	Not applicable	Added to (p)(22)	Currently treated as exempt	No emissions impact - this is a closed system vented to carbon

Table 2-3
PARs 219 and 222 Equipment Categories with
Potential NOx Emission Reductions Foregone

Equipment Categories	Total Number of Affected Units	Average Number of Units Installed per Year Since 2000
Power Pressure Washers	258	18
Asphalt Day Tankers	58	3
Asphalt Tar Pots	148	6
Small Food Ovens	55	4
Fuel Cells	2	1
Portable Diesel Heaters	9	1
Diesel Boiler	5	1
Remote Two-Way Radio Transmission Power Source	16	2 ^a
Total	551	36

a) Engines are installed in pairs. Based on the SCAQMD permit database it is assumed that new engines may be installed every other year.

III. c) *Cumulatively Considerable Impacts*

Since project-specific air quality impacts from implementing PARs 219 and 222 may exceed NOx significance thresholds (Table 2-1), air quality impacts may be cumulatively considerable as defined in CEQA Guidelines §15065(c) and, therefore, cumulatively significant. PARs 219 and 222 will be evaluated for cumulatively considerable air quality impacts in the Draft EA.

III. d) *Toxic Air Contaminants*

Most of the affected equipment would be operated in the same fashion as under the existing permit system. The two exceptions to this are the piston type internal combustion engines with a manufacturer's rating of 100 brake horsepower or less that are used exclusively for electrical generation at remote two-way radio transmission towers, which are currently regulated by Rule 1110.2; and Rule 1147 equipment (affected pressure washers, asphalt day tankers, asphalt tar pots, gas turbines, small food ovens, fuel cells, laser cutters/etchers, portable diesel heaters, and diesel boilers).

PARs 219 and 222 would exempt equipment currently subject to Rule 1110.2 and 1147, which means that diesel fueled equipment that would no longer need to be replaced with alternative-fueled technologies or retrofitted with low NOx burners or aftertreatment emission control technology. Diesel exhaust particulate is a carcinogen and chronic non-carcinogenic TAC.

In spite of the fact that Rule 1110.2 and Rule 1147 diesel-fueled equipment would be allowed to continue operating, increased exposure to TACs is not expected to occur for the following reasons. Diesel exhaust particulate is not classified as an acute non-carcinogenic TAC. Portable power pressure washers, asphalt day tankers, asphalt tar pots, portable diesel fueled heaters are considered portable equipment because they are not typically be used in the same location for extended periods of time. Since the affected equipment is portable, the same receptors would not be exposed to diesel exhaust particulates continuously over a 70-year lifetime. Therefore, no increase in health risks are expected from these affected portable equipment.

Remote two-way radio transmission power sources and diesel fueled boilers located above 4,000-foot elevations or 15 miles off shore are placed in areas with few or no offsite receptors, since the locations of these affected sources are in areas without utility, electricity or natural gas service. Because affected equipment is located in remote areas, it is unlikely that sensitive receptors would be located sufficiently close to the equipment to be continuously exposed to diesel exhaust particulate over a 70-year lifetime.

Rule 1110.2 and 1147 affected equipment are operating under existing permit requirements, which are expected to be included in operating conditions issued under PAR 222. Equipment installed after March 7, 2008 would have been evaluated for diesel exhaust particulate emissions under Rule 1401 – New Source Review of Toxic Air Contaminants. Therefore, operating conditions for this equipment under PAR 222 would be expected to include existing permit conditions that limit health risk from diesel exhaust particulate emissions.

Lastly, Rule 219 includes an exemption (s)(2), that would require written permits for equipment with health risk greater than identified in subparagraph (d)(1)(A), or paragraphs (d)(2) or (d)(3) in Rule 1401 – New Source Review of Toxic Air Contaminants. This exemption would apply to any equipment added to Rule 219 by the proposed project.

Since the proposed project is not expected to increase exposure of sensitive receptors to diesel exhaust particulate continually over a 70-year lifetime, carcinogenic and non-carcinogenic chronic health risks are expected to be less than significant.

III. e) *Odor Impacts*

Most of the affected equipment would be operated in the same fashion as under the existing permit system. The two exceptions to this are the piston type internal combustion engines with a manufacturer's rating of 100 brake horsepower or less that are used exclusively for electrical generation at remote two-way radio transmission towers, which are currently regulated by Rule 1110.2; and Rule 1147 equipment (affected potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers).

The equipment proposed to be added to PARs 219 and 222 are considered low emitters; therefore, odor impacts are expected to be minimal. Based on the above information, PARs 219 and 222 are not expected to generate significant adverse odor impacts. Therefore, this topic will not be considered further in the Draft EA.

III. g) and h) *Greenhouse Gas Impacts*

Global warming is the observed increase in average temperature of the earth's surface and atmosphere. The primary cause of global warming is an increase of greenhouse gas (GHG) emissions in the atmosphere. The six major types of GHG emissions are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), halofluorocarbons (HFCs), and perfluorocarbons (PFCs). The GHG emissions absorb longwave radiant energy emitted by the earth, which warms the atmosphere. The GHGs also emit longwave radiation both upward to space and back down toward the surface of the earth. The downward part of this longwave radiation emitted by the atmosphere is known as the "greenhouse effect."

The current scientific consensus is that the majority of the observed warming over the last 50 years can be attributable to increased concentration of GHG emissions in the atmosphere due to human activities. Events and activities, such as the industrial revolution and the increased consumption of fossil fuels (e.g., combustion of gasoline, diesel, coal, etc.), have heavily contributed to the increase in atmospheric levels of GHG emissions. As reported by the California Energy Commission (CEC), California contributes 1.4 percent of the global and 6.2 percent of the national GHG emissions (CEC, 2004). Further, approximately 80 percent of GHG emissions in California are from fossil fuel combustion (e.g., gasoline, diesel, coal, etc.).

Most of the affected equipment would be operated in the same fashion as under the existing permit system. The two exceptions to this are the piston type internal combustion engines with a manufacturer's rating of 100 brake horsepower or less that are used exclusively for electrical generation at remote two-way radio transmission towers, which are currently regulated by Rule 1110.2; and Rule 1147 equipment (affected potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers).

Rule 1147 equipment may have needed to be replaced with alternative-fueled equipment or retrofit low NO_x burners to comply with future requirements. Rule 1110.2 equipment may have needed to be replaced alternative-fueled equipment or required aftertreatment emission control equipment. The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement or retrofit of existing equipment, or installation of new equipment. Since Rule 1110.2 and Rule 1147 equipment would not be replaced, retrofitted or require aftertreatment equipment under PARs 219 and 222, the proposed project would result in a reduction in construction emissions. Although construction emissions from affected equipment that would be incorporated into PARs 219 and 222 would not be expected to occur, no credit would be taken from the elimination of construction emissions.

Natural gas fueled equipment connected to natural gas pipelines would have eliminated diesel fuel delivery trips. Propane and LNG fueled equipment would have still required fuel delivery trips. Equipment with aftertreatment may have required catalyst replacement trips, CEMS calibration trips, etc. Since it is not known what owner/operators would have done to comply with Rule 1147 or Rule 1110.2, it is difficult to quantify differences in fuel consumed by the affected sources, delivery trips and additional monitoring trips. Since trips associated with these compliance activities are routine but infrequent, the change on a daily basis between complying with Rule 1147 or Rule 1110.2, or continuing existing operations would not likely be different compared to the baseline vehicle trips. There may be differences between trips required to comply with Rule 1147 or Rule 1110.2 when compared to existing operations, but because it is not known how owner/operators would have complied with Rule 1147 or Rule 1110.2, it would be speculative to estimate differences between baseline compliance activity vehicle trips and vehicle trips associated with rule compliance. Since any changes in the number of vehicle trips per day are considered to be speculative, this impact will not be considered further.

PARs 219 and 222 would result in the continued use of diesel fuel in affected Rule 1110.2 and Rule 1147 equipment. Diesel fuel generates more GHG emissions than natural gas because diesel has a higher carbon content. It was conservatively assumed that all diesel-fueled units would have been replaced with alternative-fueled equipment; however, some Rule 1147 affected units would have been retrofitted with low NO_x burners, and some Rule 1110.2 equipment would have been retrofitted with aftertreatment emission control equipment. Rule 1147 affected

units retrofitted with low NO_x burners and Rule 1110.2 equipment retrofitted with aftertreatment emission control equipment would have continued to use diesel fuel. Therefore, GHG emissions foregone were estimated based on complete replacement of natural gas with diesel in this analysis are very conservative. The amount of natural gas used to comply with Rules 1110.2 and 1147 was estimated based on amount of energy in British thermal units contained in the diesel fuel currently consumed by affected sources. GHG emissions foregone in CO₂ equivalent (CO₂ eq) metric tons per year are summarized in Table 2-4 and detailed in Appendix B. The use of diesel fuel in affected Rule 1110.2 and Rule 1147 equipment would result in 259 metric tons of CO₂eq per year foregone, which is less than the SCAQMD CEQA GHG significance threshold of 10,000 metric tons per year. Since the CO₂eq emissions from the project are less than the significance threshold, the proposed project is not expected to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Therefore, this topic will not be considered further in the Draft EA.

Table 2-4
GHG Emission Reductions Foregone for PAR 219 and 222

Description	CO₂eq, metric ton/yr
Natural Gas	698
Diesel Fuel	957
GHG emissions foregone	259
Significance Threshold	10,000
Significant?	No

The GHG emissions foregone would be difference between the GHG emissions that would have been generated if the equipment were replaced with LNG or propane units under Rules 1110.2 and 1143 and the GHG emissions generated from the existing diesel equipment. GHG emissions foregone were estimated by comparing the GHG emissions generated by existing diesel fuel used to GHG emissions that would be generated from the equivalent amount of natural gas used on a Btu basis.

Conclusion

Based upon these considerations, the proposed project would generate significant adverse operational NO_x air quality impacts and, therefore, will be further analyzed in the Draft EA.

No other adverse air quality emissions are expected to generate significant adverse impacts. Since no significant adverse air quality impacts were identified for toxic air pollutants, odors or GHG emissions; these topics will not be further analyzed in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES.				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on biological resources will be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.

- The project adversely affects aquatic communities through construction or operation of the project.

Discussion

IV. a), b), c), d), e) & f) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the physical characteristics or placement of the affected equipment.

Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission control equipment. The affected Rule 1147 equipment would have been required to be retrofitted with low NO_x burners or replaced with equipment that did not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NO_x burners infeasible. Therefore, diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane). The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement of existing equipment, retrofit of burners or installation of aftertreatment emission control equipment. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Although previous prepared CEQA documents for Rules 1110.2 and 1147 did not identify significant adverse biological resources impacts, eliminating the Rule 1110.2 and Rule 1147 compliance requirements for affected sources would result in fewer construction activities, and therefore, reduce even further the potential to generate adverse biological resources impacts. In addition, the affected equipment is located at existing commercial or industrial facilities. Therefore, based on the reasons above, affected Rule 1147 and Rule 1110.2 sources would have no biological resource impacts compared to the existing setting.

Since PARs 219 and 222 would not affect the placement of affected equipment or require construction activities to install new or retrofit equipment, the proposed project is not expected to create any significant adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. For the same reason, the proposed project is not expected to generate substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; or have a new substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.). Further the propose project, does not include direct removal,

filling, hydrological interruption, or other means; interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Because affected equipment would likely be located at existing and commercial or industrial facilities, the purposed project would not be expected to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Based upon these considerations, significant adverse biological resources impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse biological resources impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource, site, or feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance to a community or ethnic or social group.
- Unique paleontological resources are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

Discussion

V. a), b), c), & d) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a

filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission control equipment. The affected Rule 1147 equipment would have been required to be retrofitted with low NOx burners or replaced with equipment that did not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NOx burners infeasible. Therefore, diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane). The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement of existing equipment retrofit of burners or installation of aftertreatment emission control equipment. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Although previous prepared CEQA documents for Rules 1110.2 and 1147 did not identify significant adverse cultural resources impacts, eliminating the Rule 1110.2 and Rule 1147 compliance requirements for affected sources would result in fewer construction activities, and therefore, reduce even further the potential to generate adverse cultural resource impacts. In addition, the affected equipment is located at existing commercial or industrial facilities. Therefore, based on the reasons above, affected Rule 1147 and Rule 1110.2 sources would have no cultural resource impacts compared to the existing setting.

Since PARs 219 and 222 would not affect the placement of affected equipment or require construction activities to install new or retrofit equipment, the proposed project is not expected to create any significant adverse effect to a historical resource as defined in §15064.5; cause a new significance impact to an archaeological resource as defined in §15064.5; directly or indirectly destroy a unique paleontological resource, site, or feature; disturb any human including those interred outside formal cemeteries.

Based upon these considerations, significant adverse cultural resources impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse cultural resources impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VI. ENERGY. Would the project:				
a) Conflict with adopted energy conservation plans?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the need for new or substantially altered power or natural gas utility systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Create any significant effects on local or regional energy supplies and on requirements for additional energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create any significant effects on peak and base period demands for electricity and other forms of energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Comply with existing energy standards?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts to energy and mineral resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

Discussion

VI. a), b), c), d) & e) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission control equipment. The affected Rule 1147 equipment would have been required to be retrofitted with low NOx burners or replaced with equipment that did not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NOx burners

infeasible. Therefore, diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane). The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement of existing equipment retrofit of burners or installation of aftertreatment emission control equipment. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Although previous prepared CEQA documents for Rules 1110.2 and 1147 did not identify significant adverse energy impacts, eliminating the Rule 1110.2 and Rule 1147 compliance requirements for affected sources would result in fewer construction activities, and therefore, reduce even further the potential to generate adverse energy impacts. In addition, the affected equipment is located at existing commercial or industrial facilities. Therefore, based on the reasons above, affected Rule 1147 and Rule 1110.2 sources would have no energy impacts compared to the existing setting.

Natural gas fueled equipment connected to natural gas pipes would have eliminated diesel fuel delivery trips. Propane and LNG fueled equipment would have still required fuel delivery trips. Equipment with aftertreatment may have required catalyst replacement trips, CEMS calibration trips, etc. Since it is not known what owner/operators would have done to comply with Rule 1147 or Rule 1110.2, it is difficult to quantify differences in fuel consumed by the affected sources, deliver trips and additional monitoring trips to comply with the applicable rules, compared to similar activities for sources placed into PARs 219 and/or 222. Since vehicle trips associated with these compliance activities are routine but infrequent, the change on a daily basis between complying with Rule 1147 or Rule 1110.2, or continuing existing operations would not likely be different compared to the baseline vehicle trips per day. There may be differences between trips required to comply with Rule 1147 or Rule 1110.2 when compared to existing operations, but because it is not known how owner/operators would have complied with Rule 1147 or Rule 1110.2, it would be speculative to estimate differences between baseline compliance activity vehicle trips and vehicle trips associated with rule compliance. Since any changes in the number of vehicle trips per day are considered to be speculative, this impact will not be considered further.

Addition Rule 1147 and Rule 1110.2 to PARs 219 and 222 would result in the continued use of diesel fuel in the affect of equipment. Using the same methodology used to estimate GHG emission in the air quality analysis of this IS, it is estimated that the proposed project could result in the continued use of approximately 6,418,598 gallons per year of diesel fuel. It was conservatively assumed that all diesel-fueled units would have been replaced with alternative-fueled equipment; however, some Rule 1147 affected units would have been retrofitted with low NOx burners and some Rule 1110.2 equipment would have been retrofitted with aftertreatment emission control equipment. Rule 1147 affected units retrofitted with low NOx burners and Rule 1110.2 equipment retrofitted with aftertreatment emission control equipment would have continued to use diesel fuel. Therefore, diesel fuel use estimated based on complete replacement of natural gas with diesel in this analysis is very conservative. The amount of natural gas used to comply with Rules 1110.2 and 1147 was estimated based on amount of energy in British thermal units contained in the diesel fuel currently consumed by affected sources. Continued demand for 6,418,598 gallons per year of diesel fuel would be equivalent to approximately 238,000,000 cubic feet of natural gas or propane that would not be used in place of the diesel fuel. No credit would be taken for eliminating the potential impacts from increased demand for natural gas by affected Rule 1110.2 and Rule 1147 equipment.

In fiscal year 2011, 14,728,734,063 gallons of gasoline and 2,564,017,901 gallons of diesel were sold in California.² The 6,418,598 gallons per year of diesel fuel that would be continued to be used because of PARs 219 and 222 would be less than one percent (0.25 percent) of the 2,564,017,901 gallons of diesel sold in California, so continued use of diesel fuel as a result of eliminating rule requirements for sources currently subject to either Rule 1110.2 or Rule 1147, is not considered to be a significant impact.

Because of the small size of the affected sources and the low energy demand by individual sources, it is unlikely that the affected sources would be subject to a plan; therefore, the proposed project is not expected to conflict with adopted energy conservation plans. Because of the small size of the affected sources and the low energy demand by individual sources, it is unlikely that the affected sources would result in the need for new or substantially altered power or natural gas utility systems; create any significant effects on local or regional energy supplies and on requirements for additional energy; create any significant effects on local or regional energy supplies and on requirements for additional energy; create any significant effects on peak and base period demands for electricity and other forms of energy; and would comply with existing energy standards.

Based upon these considerations, significant adverse energy impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse energy impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
• Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

² California State Board of Equalization, 2012. Fuel Taxes Statistics & Reports, <http://www.boe.ca.gov/sptaxprog/spftrpts.htm>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

Discussion

VII. a), b), c), d) & e) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission control equipment. The affected Rule 1147 equipment would have been required to be retrofitted with low NO_x burners or replaced with equipment that did not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NO_x burners infeasible. Therefore, diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane fueled). The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement of existing equipment retrofit of burners or installation of aftertreatment emission control equipment. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Although previous prepared CEQA documents for Rules 1110.2 and 1147 did not identify significant adverse geology or soil impacts, eliminating the Rule 1110.2 and Rule 1147 compliance requirements for affected sources would result in fewer construction activities, and therefore, reduce even further the potential to generate adverse geology or soil impacts. In addition, the affected equipment is located at existing commercial or industrial facilities. Since there would be no additional construction and the existing operations would continue, the affected Rule 1147 and Rule 1110.2 equipment under the proposed project are not expected to expose people or structures to potential any significant adverse effects, including the risk of loss, injury, or death involving ruptures of a known earthquake fault, strong seismic ground shaking or seismic-related ground failure, including liquefaction; result in new substantial soil erosion or the loss of topsoil; be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in new on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse; or be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property. The proposed project does not involve installing septic tanks or alternative wastewater disposal systems. Consequently, the proposed project would not generate significant adverse impacts to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Based upon these considerations, significant adverse geology and soil impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse geology and soil impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VIII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Significantly increased fire hazard in areas with flammable materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

Discussion

VIII. a), b) & c) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission control equipment. The affected Rule 1147 equipment would have been required to be retrofitted with low NOx burners or replaced with equipment that did not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NOx burners infeasible. Therefore, diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane). The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement of existing equipment retrofit of burners or installation of aftertreatment emission control equipment. Further, PARs 219 and 222 would not affect the number of new replacement or retrofit equipment installed or the physical characteristics of the equipment or the placement of affected equipment. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Therefore, based on the above reasons, no change in the types of hazards or increase in hazards are expected. In addition, the affected equipment is located at existing commercial or industrial facilities.

Adding sources to PARs 219 and 222 could potentially reduce hazards associated with aftertreatment control technology equipment (catalyst) or propane and LNG fuels. However, it would result in continuation of the existing hazards associated with diesel storage. Therefore, PARs 219 and 222 would have same or less hazards and hazardous material impacts for affected Rule 1147 and Rule 1110.2 sources, the proposed project is not expected to create a significant new or additional hazard to the public or create a reasonably foreseeable upset condition

involving the release of hazardous materials for existing sources. Therefore, based on the reasons above, affected Rule 1147 and Rule 1110.2 sources would have no hazard or hazardous impacts compared to the existing setting.

VIII. d) Government Code §65962.5 refers to hazardous waste handling practices at facilities subject to the Resources Conservation and Recovery Act (RCRA). Though some of the equipment affected by PARs 219 and 222 may be located at facilities included on the list of the hazardous materials sites compiled pursuant to Government Code §65962.5, compliance with the proposed project is not expected to affect in any way any facility's current hazardous waste handling practices. Hazardous wastes from the existing facilities are required to be managed in accordance with applicable federal, state, and local rules and regulations. Consequently, hazards impacts from the disposal/recycling of hazardous materials as a result of implementing PARs 219 and 222 is not expected to change. As a result, the potential hazard impacts at any affected facilities subject to Government Code §65962.5 are expected to be less than significant.

VIII. e) Some of the equipment added to PARs 219 and 222 may be located at facilities at facilities within two miles of an airport or airstrip, however, since PARs 219 and 222 would not affect the number of new equipment installed, the physical characteristics of the equipment or the placement of affected equipment, hazard impacts to these facilities are not expected to be significant. Since PARs 219 and 222 would not alter operations of affected Rule 1147 or Rule 1110.2 equipment, there would be no change to hazard impacts to airports or airstrips from these pieces of equipment.

VIII. f) Since PARs 219 and 222 would not affect the number of new replacement or retrofitted equipment installed, the physical characteristics of the equipment or the placement of affected equipment, impacts to local emergency response plans are not expected to be significant. Certain equipment may continue to use diesel fuel that would otherwise switched to LNG or propane because of Rule 1110.2 or Rule 1147. Therefore, the proposed project would not change existing conditions, as of today. Emergency response plans are typically prepared in coordination with the local city or county emergency plans to ensure the safety of not only the public (surrounding local communities), but the facility employees as well. The proposed project is not expected to impair implementation of, or physically interfere with any adopted emergency response plan or emergency evacuation plan because no changes to existing equipment are anticipated. Any existing facilities affected by the proposed project would typically already have their own emergency response plans in place. Hazard impacts from equipment added to PARs 219 and 222 are expected to have the same and less than significant compared to sources subject to the existing permitting programs. Thus, PARs 219 and 222 are not expected to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan, so it is not expected to be significant.

VIII. g) & h) As explained in the preceding discussions, hazard impacts from new and existing equipment affected by PARs 219 and 222 are expected to have the same and less than significant compared to sources subject to the existing permitting programs. Therefore, the proposed project is not expected to increase the use of flammable materials in or near areas with flammable brush, grass, or trees over than what would occur had the affected equipment been permitted under the existing permit programs. Therefore, the proposed project is not expected to result in significant adverse wildfire risk impacts.

Based upon these considerations, significant adverse hazards and hazardous materials impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse hazards and hazardous materials impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IX. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
e) Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 262,820 gallons per day of potable water.
- The project increases demand for total water by more than five million gallons per day.

Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

Discussion

IX. a), b), h) & i) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission control equipment. The affected Rule 1147 equipment would have been required to be retrofitted with low NOx burners or replaced with equipment that did not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NOx burners infeasible. Therefore, diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane). The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement of existing equipment retrofit of burners or installation of aftertreatment emission control equipment. Further, PARs 219 and 222 would not affect the number of new replacement or retrofit equipment installed or the physical characteristics of the equipment or the placement of affected equipment. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Therefore, based on the above reasons, no change in the hydrology and water quality is expected. In addition, the affected equipment is located at existing commercial or industrial facilities.

Since PARs 219 and 222 would not affect the number of new equipment installed or existing retrofitted, the physical characteristics of the equipment or the placement of affected equipment, no change in the types of water quality or increase in water demand is expected. Certain

equipment may continue to use diesel that would have otherwise have switched to LNG or propane. Thus, water quality and water demand impacts from equipment affected by PARs 219 and 222 are expected to be the same and less than significant compared to sources subject to existing permitting programs. Therefore, no changes to any existing wastewater treatment permits would be necessary. As a result, the proposed project is not expected to interfere with any affected facility's ability to comply with existing wastewater treatment requirements or conditions from any applicable Regional Water Quality Control Board or local sanitation district because the proposed project has no effect on existing wastewater generation.

IX. c) & d) As explained above, no change in water demand is expected whether affected units undergo the permit process or are added to PARs 219 and/or 222. Similarly, sources affected by the proposed project are typically located at existing commercial or industrial facilities. Consequently, the proposed project is not expected to have significant adverse effects on any existing drainage patterns, or increase the rate or amount of surface runoff water that would exceed the capacity of existing or planned wastewater or stormwater drainage systems.

IX. e) & f) PARs 219 and 222 does not include or require any new or additional construction activities to build additional housing that could be located in 100-year flood hazard areas. Similarly, sources affected by the proposed project are typically located at existing commercial or industrial facilities. Consequently, PARs 219 and 222 are not expected to result in placing housing in 100-year flood hazard areas that could create new flood hazards. Since construction activities under PARs 219 and 222 are expected to be the same or less as that required under the existing permit process, the proposed project is not expected to result in significance impacts regarding placing housing in a 100-year flood zone.

For the same reasons as those identified in the proceeding paragraph, PARs 219 and 222 are not expected to create significant adverse risk impacts from flooding as a result of failure of a levee or dam or inundation by seiches, tsunamis, or mudflows.

IX. g) For the same reasons listed in IX a), b), c), d), h) and i) above, the propose project is not expected to require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects.

Based upon these considerations, significant adverse hydrology and water quality impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse hydrology and water quality impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
X. LAND USE AND PLANNING.				
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

Discussion

X. a) & b) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission control equipment. The affected Rule 1147 equipment would have been required to be retrofitted with low NOx burners or replaced with equipment that did not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NOx burners infeasible. Therefore, diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane). The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement of existing equipment retrofit of burners or installation of aftertreatment emission control equipment. Further, PARs 219 and 222 would not affect the number of new replacement or retrofit equipment installed or the physical characteristics of the equipment or the placement of affected

equipment. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Therefore, based on the above reasons, no change in land use and planning impacts are expected. In addition, the affected equipment is located at existing commercial or industrial facilities.

Land use and other planning considerations are determined by local governments. As discussed above, there are no provisions in PARs 219 and 222 that would physically divide an established community; or affect land use plans, policies, or regulations. Further, PARs 219 and 222 would be consistent with the typical industrial, commercial, and institutional zoning of the affected facilities. Operations of equipment at affected facilities would still be expected to comply, and not interfere, with any applicable land use plans, zoning ordinances, habitat conservation or natural community conservation plans. As a result land use and planning impacts are concluded to be less than significant.

Based upon these considerations, significant adverse land use and planning impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse land use and planning impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XI. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Discussion

XI. a) & b) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing

program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission control equipment. The affected Rule 1147 equipment would have been required to be retrofitted with low NOx burners or replaced with equipment that did not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NOx burners infeasible. Therefore, diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane). The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement of existing equipment retrofit of burners or installation of aftertreatment emission control equipment. Further, PARs 219 and 222 would not affect the number of new replacement or retrofit equipment installed or the physical characteristics of the equipment or the placement of affected equipment. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Therefore, based on the above reasons, no change in mineral resources impacts are expected. In addition, the affected equipment is located at existing commercial or industrial facilities. As a result mineral resource impacts are concluded to be less than significant.

Therefore, the proposed project is not expected to result in the loss of availability of a known mineral resource of value to the region and the residents of the state such as aggregate, coal, clay, shale, et cetera, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Based upon these considerations, significant adverse mineral resources are not anticipated and, therefore, no further analysis is required. Since no significant adverse mineral resources were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XII. NOISE. Would the project result in:				
a) Exposure of persons to or generation of permanent noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on noise will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

Discussion

XII. a), b) & c) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission control equipment. The affected Rule 1147 equipment would have been required to be retrofitted with low NOx burners or replaced with equipment that did not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NOx burners infeasible. Therefore, diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane). The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement of existing equipment retrofit of burners or installation of aftertreatment emission control equipment. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Although previous prepared CEQA documents for Rules 1110.2 and 1147 did not identify significant adverse noise impacts, eliminating the Rule 1110.2 and Rule 1147 compliance requirements for affected sources would result in fewer construction activities, and therefore, reduce even further the potential to generate noise adverse impacts. In addition, the affected equipment is located at existing commercial or industrial facilities. Therefore, based on the reasons above, affected Rule 1147 and Rule 1110.2 sources would have no noise impacts compared to the existing setting.

PARs 219 and 222 would eliminate compliance requirements for sources currently subject to Rules 1110.2 and 1147, they are not expected affect the number of new equipment installed or existing equipment retrofitted with low NOx burners or aftertreatment emission control technology, the physical characteristics of the equipment or the placement of affected equipment compared to baseline conditions. Similarly, PARs 219 and 222 would not require construction activities, and in fact, may eliminate some construction activities since Rules 1110.2 and 1147 would no longer be subject to compliance requirements that require construction to install new or retrofit existing equipment. Therefore, the proposed project is not expected to create noise in excess of standard established in local general plans or noise ordinances or other applicable standards, excessive groundborne vibration, or substantially increase ambient noise levels other than would occur under the existing permit process.

Although the proposed project is not expected to generate noise from construction or increase operational noise levels, affected facilities would still be subject to Occupational Safety and Health Administration (OSHA) and California-OSHA (Cal/OSHA) noise standards to protect worker health. Operators/owners of affected equipment are expected to follow all OSHA and Cal/OSHA noise safety requirements.

XII. d) For facilities with equipment that would be added to PARs 219 and 222, they may be located at sites within an airport land use plan or within two miles of a public airport. Implementation of the proposed project is expected to expose people residing or working in the project area to the same noise levels as they would be exposed to under the existing permit system for the same reasons described in discussion XII a), b) and c). Similarly, although significant noise impacts are not expected, facilities with affected equipment must comply with

local noise ordinances and applicable OSHA or Cal/OSHA workplace noise reduction requirements.

Based upon these considerations, significant adverse noise impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse noise impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIII. POPULATION AND HOUSING.				
Would the project:				
a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

Discussion

XIII. a) & b) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

Under the current Rule 1110.2 requirements, affected remote internal combustion engines would likely have been replaced by engines that do not run on diesel fuel (i.e., natural gas or propane) and/or required owner/operators to install aftertreatment emission control. Equipment exempted from Rule 1110.2 requirements by PARs 219 and 222 would not require replacement of engines with equipment fueled by natural gas or propane and/or installation of aftertreatment emission

control equipment. The affected Rule 1147 equipment would have been required to be retrofitted with low NOx burners or replaced with equipment that did not run on diesel fuel (i.e., natural gas or propane) to comply with Rule 1147. However, space limitations associated with most combustion of existing units would have rendered such retrofitting with low NOx burners infeasible. Therefore, diesel fueled potable pressure washers, asphalt day tankers, asphalt tar pots, small food ovens, portable diesel heaters, and diesel boilers would likely to have been replaced with alternatively fueled devices (natural gas or propane fueled). The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement of existing equipment retrofit of burners or installation of aftertreatment emission control equipment. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Although previous prepared CEQA documents for Rules 1110.2 and 1147 did not identify significant adverse population or housing impacts, eliminating the Rule 1110.2 and Rule 1147 compliance requirements for affected sources would result in fewer construction activities, and therefore, reduce even further the potential to generate adverse impacts to population or housing resources. In addition, the affected equipment is located at existing commercial or industrial facilities. Therefore, based on the reasons above, affected Rule 1147 and Rule 1110.2 sources would have no population or housing impacts compared to the existing setting.

Human population within the SCAQMD's jurisdiction is anticipated to grow regardless of implementing PARs 219 and 222. Eliminating the requirement for written permits by adding equipment to PARs 219 and/or imposing filing requirements by adding equipment to PAR 222 would not require any construction activities or require additional construction employees than would be required under the existing permit system. Similarly, additional employees would not be required during operation because eliminating the requirement for written permits and/or imposing filing requirements is not expected to require additional employees compared to the existing permit system.

As explained above, population growth in the district is not expected to be affected directly or indirectly as a result of adopting and implementing PARs 219 and 222. Further, PARs 219 and 222 would not indirectly induce growth in the area of affected facilities. The construction of single- or multiple-family housing units would not be required as a result of implementing the proposed project since no new employees would be required for construction or operation at affected facilities. The proposed project is not expected to require relocation of affected equipment or facilities, so existing housing or populations in the district are not anticipated to be displaced necessitating the construction of replacement housing elsewhere. Finally, the proposed project does not include extension of roads or other infrastructure. As a result, the proposed project is not anticipated to generate any significant adverse effects, either direct or indirect, on population growth in the district or population or housing distribution.

Based upon these considerations, significant adverse population and housing impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse population and housing impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES. Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

Discussion

XIV. a) & b) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment. Therefore, no changes to affected equipment that could result in emergency situations requiring emergency responders such as fire or police departments are anticipated.

PARs 219 and 222 would exempt some Rule 1147 and Rule 1110.2 sources that either would have future or existing compliance requirements to replacement sources or burners or install aftertreatment emission control equipment. The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement or retrofit equipment or aftertreatment emission control equipment construction. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new

affected equipment. Therefore, affected Rule 1147 and Rule 1110.2 sources would have no public services impacts compared to the existing setting, because affected equipment are located at existing commercial or industrial facilities.

XIV. c) & d) As noted in the “Population and Housing” discussion, implementation of the proposed project would not require new employees for construction or operation because different or additional construction or operational activities would not be necessary to comply with PAR 219s and 222. As a result, PAR 219s and 222 would have no direct or indirect effects on population growth in the district. Therefore, there would be no increase in local population and thus no impacts are expected to local schools or parks.

Because the proposed project is expected require the same resources as required under the existing permit system, it would not trigger a need for additional government services. Further, the proposed project would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. There would be no increase in population and, therefore, no need for physically altered government facilities.

Based upon these considerations, significant adverse public services impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse public services impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XV. RECREATION.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment or recreational services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

Discussion

XV. a) & b) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

PARs 219 and 222 would exempt some Rule 1147 and Rule 1110.2 sources that either would have future or existing compliance requirements to replacement sources or burners or install aftertreatment emission control equipment. The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement or retrofit equipment or aftertreatment emission control equipment construction. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Therefore, affected Rule 1147 and Rule 1110.2 sources would have no recreation impacts compared to the existing setting, because affected equipment are located at existing commercial or industrial facilities.

As previously discussed under “Land Use,” there are no provisions in PARs 219 and 222 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements would be altered by the proposed project. Further, implementation of PARs 219 and 222, that is, exempting specific equipment from written permits would not increase the use of existing neighborhood and regional parks or other recreational facilities or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment because the proposed project is not expected to induce population growth.

Based upon the above considerations, significant adverse recreation impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse recreation impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVI. SOLID/HAZARDOUS WASTE.				
Would the project:				
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

The proposed project impacts on solid/hazardous waste will be considered significant if the following occurs:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

Discussion

XVI. a) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

PARs 219 and 222 would exempt some Rule 1147 and Rule 1110.2 sources that either would have future or existing compliance requirements to replacement sources or burners or install aftertreatment emission control equipment. The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no replacement or retrofit equipment or aftertreatment emission control equipment construction. Therefore, affected Rule 1147 and Rule 1110.2 sources would have no solid and hazardous waste impacts compared to the existing setting, because affected equipment are located at existing commercial or industrial facilities.

XVI. b) No construction or changes in operations are expected; therefore, implementing PARs 219 and 222, which exempts affected equipment from written permits, is not expected to hinder in any way any affected facility's ability to comply with existing federal, state, and local regulations related to solid and hazardous wastes. Consequently, it is anticipated that operators of affected facilities would continue to comply with federal, state, and local statutes and regulations related to solid and hazardous waste handling and disposal.

Based on the above information, PARs 219 and 222 is not expected to increase the volume of solid or hazardous wastes that cannot be handled by existing municipal or hazardous waste disposal facilities, or require additional waste disposal capacity other than what would already occur under the existing permitting system. Further, implementing PARs 219 and 222 is not expected to interfere with any affected facility's ability to comply with applicable local, state, or federal waste disposal regulations.

Based upon these considerations, significant adverse solid/hazardous waste impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse solid/hazardous waste impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION/TRAFFIC.				
Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Significance Criteria

Impacts on transportation/traffic will be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.
- The need for more than 350 employees
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day
- Increase customer traffic by more than 700 visits per day.

Discussion

XVII. a), b) & f) PARs 219 and 222 would result in specific equipment that are currently subject to permit requirements to be either exempt from permitting requirements or placed into a filing program. Most existing affected equipment would continue to be subject to applicable rule requirements or permit conditions included in existing permits. In regard to affected equipment installed after PAR 219 and 222 are amended, SCAQMD staff has concluded that changes to PARs 219 and 222 would not promote the installation of new affected equipment; only eliminate the requirement for written permits. Eliminating the requirement for written permits is not expected to alter the number of pieces of equipment installed, physical characteristics or placement of the affected equipment.

PARs 219 and 222 would exempt some Rule 1147 and Rule 1110.2 sources that either would have future or existing compliance requirements to replacement burners or install aftertreatment emission control equipment. The inclusion of these Rule 1147 and Rule 1110.2 sources in Rules 219 and 222 would result in no retrofit or aftertreatment emission control equipment construction; therefore, affected Rule 1147 and Rule 1110.2 sources would have no transportation/traffic impacts, such as new worker commute trips, haul truck trips to deliver equipment or fuel, etc., compared to the existing setting, because affected equipment are located at existing commercial or industrial facilities.

As noted in the "Discussion" sections of other environmental topics, compliance with PARs 219 and 222 is not expected to require construction activities other than what would already be required for new affected equipment under the existing permit system because most affected equipment would continue to be subject to applicable rules and permit conditions. Removing the requirement for a written permit or imposing filing requirements on affected equipment is not expected to promote the construction of new facilities or associated vehicle trips. Any operational impacts from PARs 219 and 222 are expected to be the same as those under the existing permit system for new affected equipment. Since construction and operations under

PARs 219 and 222 and the existing permit system are expected to be the same for new affected equipment no increase in construction or employee trips are expected and no change in traffic/circulation is expected. Therefore, in regard to new equipment the implementation of PARs 219 and 222 is not expected to conflict with an applicable plan, policy establishing measures of effectiveness for the performance of the circulatory system, applicable congestion management program, or conflict with adopted policies, plans or programs regarding public transit, bicycle or pedestrian facilities.

Affected Rule 1147 equipment would no longer need to be replaced with natural gas fueled equipment or aftertreatment emission control equipment to comply with future requirements. Affected Rule 1110.2 would no longer need to be replaced with propane or LNG fueled equipment or aftertreatment emission control equipment. Natural gas fueled equipment connected to natural gas pipes would have eliminated diesel fuel deliver trips. Propane and LNG fueled equipment would have still required fuel deliver trips. Equipment with aftertreatment may have required ammonia delivery trips, catalyst replacement trips, CEMS calibration trips, etc. Since it is not known what owner/operators would have done to comply with Rule 1147 or Rule 1110.2, it is difficult to quantify differences in fuel or electricity consumed by the affected sources, deliver trips and additional monitoring trips. Since trips associated with these activities are routine, but infrequent, the change on a daily basis between complying with Rule 1147 or Rule 1110.2, or continuing existing operations would not likely be different. Further, because it is not known how owner/operators would have complied with Rule 1147 or Rule 1110.2, it would be speculative to estimate differences between electricity, fuel types and fuel usage. Therefore, although PARs 219 and 222 are not expected to have traffic or transportation impacts related to affected Rule 1147 or Rule 1110.2 equipment, actual traffic impacts are considered to be speculative and will not be analyzed further in the Draft EA.

XVII. c) Some of the facilities that would be affected by PARs 219 and 222 may be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. However, any actions that would be taken to comply with the proposed project are not expected to influence or affect air traffic patterns or navigable air space, since exempting affected equipment from written permits or making equipment subject to filing requirements for most types of affected equipment does not alter or remove existing operating conditions or applicable rule requirements. Changes in construction or operations from adding equipment to PARs 219 and is not expected. Thus, PARs 219 and 222 would not result in a change in air traffic patterns including an increase in traffic levels or a change in location that results in substantial safety risks.

XVII. d) Exempting affected equipment from written permits does not involve construction of any roadways or other transportation design features, so there would be no change to current roadway designs that could increase traffic hazards. Thus, the proposed project is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the affected facilities.

XVII. e) Since construction and operation would be the same under PARs 219 and 222 and compared to the existing permitting system, emergency access at each affected facility is not expected to be impacted any differently. Further, operators of affected equipment are expected to continue to maintain their existing emergency access gates. Therefore, the proposed project is not expected to increase hazards due to design features or alter emergency access.

Based upon these considerations, significant adverse transportation/traffic impacts are not anticipated and, therefore, no further analysis is required. Since no significant adverse transportation/traffic impacts were identified; therefore, this topic will not be evaluated further in the Draft EA.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion

XVIII. a) As discussed in the "Biological Resources" section, PARs 219 and 222 are not expected to significantly adversely affect plant or animal species or the habitat on which they rely because any construction and operational activities associated with affected sources are expected to be the same under PARs 219 and 222 as under the existing permitting system. In addition, affected equipment is typically located entirely within the boundaries of existing

facilities in commercial, industrial or institutional areas which have already been greatly disturbed and that currently do not support any species of concern or the habitat on which they rely. PARs 219 and 222 are not expected to reduce or eliminate any plant or animal species or destroy prehistoric records of the past.

XVIII. b) Based on the foregoing analyses, PARs 219 and 222 would not result in significant adverse project-specific environmental impacts other than NOx air quality impacts. Furthermore, potential adverse impacts from implementing PARs 219 and 222 would not be "cumulatively considerable" as defined by CEQA Guidelines §15064(h)(1) for any environmental topic because there are no, or only minor incremental project-specific impacts that were concluded to be less than significant. Therefore, since project-specific impacts are not considered to be cumulative considerable, there is no potential for significant adverse cumulative or cumulatively considerable impacts to be generated by the proposed project for any environmental topic other than from NOx air quality impacts. Cumulative NOx air quality impacts will be further analyzed in the Draft EA.

XVIII. c) Based on the foregoing analyses, PARs 219 and 222 are not expected to cause adverse effects on human beings for any environmental topic other than from NOx air quality impacts. As previously discussed in items I through XVIII, the proposed project has no potential to cause significant adverse environmental effects other than from NOx air quality impacts. Significant NOx air quality impacts will be further analyzed in the Draft EA.

APPENDIX A (OF THE INITIAL STUDY)

PROPOSED AMENDED RULES 219 AND 222

The PARs 219 and 222 versions dated March 2013 were circulated with the Initial Study released on October 18, 2012 for a 30-day public review and comment period ending November 16, 2012. Original hard copies of the Initial Study, which include version March 2013 versions of PARs 219 and 222 circulated for public review, can be obtained through the SCAQMD Public Information Center at the Diamond Bar headquarters or by calling (909) 396-2039.

APPENDIX B (OF THE INITIAL STUDY)

ASSUMPTIONS AND CALCULATIONS

Table B-1
Potential GHG Emission Reductions Foregone For Proposed Amended Rule 219/222

GHG Emissions from Remote Two-Way Radio Transmission Power Sources

Fuel	Number of ICE	Rating, bhp/hr	Conversion, Btu/hr/hp	Hours per Day	Days per Year	CO2 kg/MMBtu	CH4 g/btu	N2O g/MMbtu	CO2eq g/btu	CO2eq metric ton/yr
Natural Gas	16	100	2,544	24	183	53	0.9	0.1	0.05	10
Diesel	16	100	2,544	24	183	73	3	0.6	0.07	13

CO2, CH4 and N2O emission factors from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

GHG CO2 equivalency factors - CH4 = 21, N2O = 310

CO2 eq, metric ton/year = (number of ICE x rating, bhp/hr)/(conversion, btu/hr/bhp/hr) x hr/day x day/year x CO2eq, g/btu x (lb/453.59 g) x (metric ton/2204.623 lb)

GHG Emissions from Power Pressure Washers

Fuel	Number of Washers	Daily Usage, gal	Avg Firing Rate (% of Max Rate)	% of Time Fired per Hour	Avg % of Units Operating Each Day	Conversion, btu/barrel	Conversion, gal/barrel	Daily Usage, MMBtu/day	Day per Week	Weeks per Year	CO2 kg/MMBtu	CH4 g/MMbtu	N2O g/MMbtu	CO2eq g/btu	CO2eq metric ton/yr
Natural Gas	250		0.75	0.66	0.75			858	5	52	53	0.9	0.1	0.05	0.012
Diesel	250	50	0.75	0.66	0.75	5.825	31.5	858	5	52	73	3	0.6	0.07	0.016

CO2, CH4 and N2O emission factors from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

GHG CO2 equivalency factors - CH4 = 21, N2O = 310

Daily usage, mmbtu/day = daily usage, gal x conversion, btu/barrel x (barrel/31.5 gal) x Avg Firing Rate x Percentage Time Fired per Hour x Avg Percentage of Units Operating Each Day

CO2 eq, metric ton/year = (number of washers x daily usage, mmbtu/day) x days per week x weeks per year x CO2eq, g/btu x (lb/453.59 g) x (metric ton/2204.623 lb)

GHG Emissions from Asphalt Tankers

Fuel	Number of Tankers	Daily Usage, gal	Avg Firing Rate (% of Max Rate)	% of Time Fired per Hour	Avg % of Units Operating Each Day	Conversion, btu/barrel	Conversion, gal/barrel	Daily Usage, MMBtu/day	Day per Week	Weeks per Year	CO2 kg/MMBtu	CH4 g/MMBtu	N2O g/MMBtu	CO2eq g/btu	CO2eq metric ton/yr
Natural Gas	58		0.9	1	0.75			1,151	6	52	53	0.9	0.1	0.05	0.019
Diesel	58	159	0.9	1	0.75	5.825	31.5	1,151	6	52	73	3	0.6	0.07	0.026

CO2, CH4 and N2O emission factors from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

GHG CO2 equivalency factors - CH4 = 21, N2O = 310

Daily usage, mmbtu/day = daily usage, gal x conversion, btu/barrel x (barrel/31.5 gal) x Avg Firing Rate x Percentage Time Fired per Hour x Avg Percentage of Units Operating Each Day

CO2 eq, metric ton/year = (number of washers x daily usage, mmBtu/day) x days per week x weeks per year x CO2eq, g/btu x (lb/453.59 g) x (metric ton/2204.623 lb)

GHG Emissions from Asphalt Tar Pots

Fuel	Number of Pots	Daily Usage, gal	Avg Firing Rate (% of Max Rate)	Percentage of Time Fired per Hour	Avg % of Units Operating Each Day	Conversion, btu/barrel	Conversion, gal/barrel	Daily Usage, MMBtu/day	Day per Week	Weeks per Year	CO2 kg/MMBtu	CH4 g/MMBtu	N2O g/MMBtu	CO2eq g/btu	CO2eq metric ton/yr
Natural Gas	148		0.9	1	0.75			2,937	5.5	52	53	0.9	0.1	0.05	0.045
Diesel	148	159	0.9	1	0.75	5.825	31.5	2,937	5.5	52	73	3	0.6	0.07	0.062

CO2, CH4 and N2O emission factors from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

GHG CO2 equivalency factors - CH4 = 21, N2O = 310

Daily usage, mmbtu/day = daily usage, gal x conversion, btu/barrel x (barrel/31.5 gal) x Avg Percentage of Units Operating Each Day

CO2 eq, metric ton/year = (number of washers x daily usage, mmBtu/day) x days per week x weeks per year x CO2eq, g/btu x (lb/453.59 g) x (metric ton/2204.623 lb)

GHG Emissions from Portable Diesel Heaters

Fuel	Number of Heaters	Rating, Btu/hr	Hours per Day	Days per Year	Avg % of Units Operating Each Day	CO2 kg/MMBtu	CH4 g/MMbtu	N2O g/MMbtu	CO2eq g/btu	CO2eq metric ton/yr
Natural Gas	9	250,000	12	365	0.75	53	0.9	0.1	0.05	395
Diesel	9	250,000	12	365	0.75	73	3	0.6	0.07	542

CO2, CH4 and N2O emission factors from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

GHG CO2 equivalency factors - CH4 = 21, N2O = 310

CO2 eq, metric ton/year = (number of heaters x daily usage, mmBtu/hr) x hr/day x day/year x Avg Percentage of Units Operating Each Day x CO2eq, g/btu x (lb/453.59 g) x (metric ton/2204.623 lb)

GHG Emissions from Remote Diesel Boilers

Fuel	Number of Boilers	Rating, Btu/hr	Hours per Day	Days per Year	Avg Firing Rate (% of Max Rate)	CO2 kg/MMBtu	CH4 g/MMbtu	N2O g/MMbtu	CO2eq g/btu	CO2eq metric ton/yr
Natural Gas	5	1,000,000	12	183	0.5	53	0.9	0.1	0.05	293
Diesel	5	1,000,000	12	183	0.5	73	3	0.6	0.07	402

CO2, CH4 and N2O emission factors from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

GHG CO2 equivalency factors - CH4 = 21, N2O = 310

CO2 eq, metric ton/year = (number of heaters x daily usage, mmBtu/hr) x hr/day x day/year x Avg Firing Rate x CO2eq, g/btu x (lb/453.59 g) x (metric ton/2204.623 lb)

Potential GHG Emission Reductions Foregone from Proposed Amended Rule 219/222

Description	CO2eq metric ton/yr
Natural Gas	698
Diesel	957
GHG emissions foregone	259

PARs 219 and 222 would result in the continued use of diesel fueled equipment that may have been replaced with LNG or propane fueled equipment. It is conservative to assume that all diesel fueled units would be replaced with LNG or propane fueled equipment, since many affected Rule 1147 and Rule 1110.2 units would have been retrofitted with low NOx burners or aftertreatment equipment, so they would have continued to use diesel fuel. Therefore, the estimated GHG emissions foregone are very conservative.

Table B-2
Potential Amount of Diesel Fuel Used Instead of LNG/Propane for Proposed Amended Rule 219/222

Remote Two-Way Radio Transmission Power Sources

Fuel	Number of ICE	Rating, bhp	Hours per Day	Days per Year	Avg % of Units Operating Each Day	Conversion, Btu/hr/bhp	High Heat Value, Btu/cft	Conversion, MMBtu/barrel	Conversion, gal/barrel	Daily Usage, gal/yr	Daily Usage, MMcf/yr
Natural Gas	16	100	24	183	0.5	2,544	1,050				8
Diesel	16	100	24	183	0.5	2,544	1,050	5.825	31.5	48,214	

High heat value and conversions from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

Daily usage, gal/yr = (number of ICE x rating, bhp x 2,544 Btu/hr/bph x 24 hours per day x 183 days per year x 3.15 gal/barrel)/(5.825 MMBtu/barrels x 1,000,000 Btu/MMBtu)

Daily usage, MMcf/yr = (number of ICE x rating, bhp x 2,544 Btu/hr/bph x 24 hours per day x 183 days per year)/(1,050 Btu/cft x 1,000,000 cft/MMcf)

Power Pressure Washers

Fuel	Number of Washers	Daily Usage, gal	Weeks per Year	Days per Week	High Heat Value, Btu/cft	Avg Firing Rate (% of Max Rate)	Percentage of Time Fired per Hour	Avg % of Units Operating Each Day	Conversion, btu/barrel	Conversion, gal/barrel	Daily Usage, MMBtu/day	Daily Usage, gal/yr	Daily Usage, MMcf/year
Natural Gas	250		5	52	1,050	0.75	0.66	0.75			858		212
Diesel	250	50	5	52	1,050	0.75	0.66	0.75	5.825	31.5	858	3,250,000	

High heat value and conversions from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

Daily usage, gal/yr = number of washers x daily usage, gal x 365 days per year x avg firing rate x percentage time fired per hour x avg percentage of units operating each day

Daily usage, MMBtu/day = (number of washers x daily usage, gal x 365 days per year x 5.825 MMBtu/barrel)/(3.5 gal/barrel)

Daily usage, MMcf/yr = (number of washers x rating, bhp x daily usage, MMBtu/day x days per year)/(1,050 MMBtu/MMcf)

Asphalt Day Tankers

Fuel	Number of Tankers	Daily Usage, gal	Days per Weeks	Days per Year	High Heat Value, Btu/cft	Avg Firing Rate (% of Max Rate)	Percentage of Time Fired per Hour	Avg % of Units Operating Each Day	Conversion, btu/barrel	Conversion, gal/barrel	Daily Usage, MMBtu/day	Daily Usage, gal/yr	Daily Usage, MMcf/year
Natural Gas	58		6	52	1,050	0.9	1	0.75			362		108
Diesel	58	50	6	52	1,050	0.9	1	0.75	5.825	31.5	362	904,800	

High heat value and conversions from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

Daily usage, gal/yr = number of washers x daily usage, gal avg percentage of units operating each day

Daily usage, MMBtu/day = (number of washers x daily usage, gal x days per week x weeks per year x 5.825 MMBtu/barrel)/(3.5 gal/barrel)

Daily usage, MMcf/yr = (number of washers x rating, bhp x daily usage, MMBtu/day x days per week x weeks per year)/(1,050 MMBtu/MMcf)

Asphalt Tar Pots

Fuel	Number of Pots	Daily Usage, gal	Days per Weeks	Days per Year	High Heat Value, Btu/cft	Avg Firing Rate (% of Max Rate)	Percentage of Time Fired per Hour	Avg % of Units Operating Each Day	Conversion, btu/barrel	Conversion, gal/barrel	Daily Usage, MMBtu/day	Daily Usage, gal/yr	Daily Usage, MMcf/year
Natural Gas	148		5.5	52	1,050	0.9	1	0.75			924		252
Diesel	148	50	5.5	52	1,050	0.9	1	0.75	5.825	31.5	924	2,116,400	

High heat value and conversions from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

Daily usage, gal/yr = number of washers x daily usage, gal x avg percentage of units operating each day

Daily usage, MMBtu/day = (number of washers x daily usage, gal x days per week x weeks per year x 5.825 MMBtu/barrel)/(3.5 gal/barrel)

Daily usage, MMcf/yr = (number of washers x rating, bhp x daily usage, MMBtu/day x days per week x weeks per year)/(1,050 MMBtu/MMcf)

Portable Diesel Heaters

Fuel	Number of Heaters	Rating, Btu/hr	Avg % of Units Operating Each Day	Hours per Day	Days per Year	High Heat Value, Btu/cft	Conversion, MMBtu/barrel	Conversion, gal/barrel	Daily Usage, gal/yr	Daily Usage, MMcf/year
Natural Gas	9	250,000	0.75	24	183	1,050				7.0
Diesel	9	250,000	0.75	24	183	1,050	5.825	31.5	39,970	

High heat value and conversions from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

Daily usage, MMcf/yr = (number of heaters x rating, Btu/hr x hours per day x days per year)/(1,050 Btu/cft x 1,000,000 cft/MMcf) x Avg % of Units Operating Each Day

Daily usage, gal/yr = (number of heaters x rating, Btu/hr x hours per day x days per year x 31.5 gal/barrel)/(5.825 MMBtu/barrel x 1,000,000 cft/MMcf) x Avg % of Units Operating Each Day

Remote Diesel Boilers

Fuel	Number of Boilers	Rating, Btu/hr	Avg Firing Rate (% of Max Rate)	Hours per Day	Days per Year	High Heat Value, Btu/cft	Conversion, btu/barrel	Conversion, gal/barrel	Daily Usage, gal/yr	Daily Usage, MMcf/year
Natural Gas	5	1,000,000	0.5	24	183	1,050				10.4
Diesel	5	1,000,000	0.5	24	183	1,050	5.825	31.5	59,215	

High heat value and conversions from ARB, Instructional Guidance for Mandatory GHG Emissions Reporting

Daily usage, MMcf/yr = (number of heaters x rating, Btu/hr x hours per day x days per year)/(1,050 Btu/cft x 1,000,000 cft/MMcf) x Avg Percentage of Units Operating Each Day

Daily usage, gal/yr = (number of heaters x rating, Btu/hr x hours per day x days per year x 31.5 gal/barrel)/(5.825 MMBtu/barrel x 1,000,000 cft/MMcf) x Avg Percentage of Units Operating Each Day

Annual Fuel Use

Fuel Type	Fuel Use
Diesel use, gal/year	6,418,598
Natural gas use, MMcf/yr	238

PARs 219 and 222 would result in the continued use of diesel fueled equipment that may have been replaced with LNG or propane fueled equipment. It is conservative to assume that all diesel fueled units would be replaced with LNG or propane fueled equipment, since many affected Rule 1147 and Rule 1110.2 units would have been retrofitted with low NOx burners or aftertreatment equipment, so that they would have continued to use diesel fuel. Therefore, the assumption that all of the equipment would have been replaced with LNG or propane fueled equipment is very conservative.

APPENDIX C (OF THE ~~DRAFT~~ FINAL ENVIRONMETNAL ASSESSMENT)

ASSUMPTIONS AND CALCULATIONS

Table C-1
Daily NOx Emission Reductions Foregone For Proposed Amended Rules 219 and 222

Proposed PAR 219 Exemptions and PAR 222 Equipment Categories ^a	PARs 219/222 Criteria	Number of Existing Units	Existing Permitted Emissions (lb/day)	Current Emissions (ppm)	Rule 1147 Limit (ppm)	Average Firing Rate (Percent of Max Rating)	Percentage of Time Burner is Firing Each Hour	Average Percentage of Units Operating Each Day	Actual Existing Emissions (lb/day)	Actual Rule 1147 or 1110.2 Emissions (lb/day)	Daily NOx Reductions Foregone (lb/day)
Pressure Washers	< 50 gal Fuel/Day, ≤ 150,000 Btu/hr	261	64	80	40	0.75	0.66	0.75	24	12	12
Asphalt Day Tankers	159 - 5,000 Gallons, LPG - Fired	58	32	110	60	0.9	1	0.75	22	12	10
Asphalt Tar Pots	159 - 1,000 Gallons, LPG - Fired	147	120	110	60	0.9	1	0.75	81	44	37
Small Food Ovens	Natural Gas-Fired, ≤ 2 MM Btu/hr	55	59	102	30	0.6	1	0.9	32	9.4	22
Fuel Cells	< 90,000 Therms/yr	2	3.0	60	60	1	1	1	3.0	3.0	0
Portable Diesel Heaters	≤ 250,000 Btu/hr	9	2.9	80	40	1	1	0.75	2.2	1.1	1.1
Diesel Boiler	< 2 MM Btu/hr, > 4,000 Ft Elev, >15 Mi Offshore	5	3.0	80	40	0.5	1	1	1.5	0.7	0.7
Remote Two-Way Radio Transmission Power Source ^b	Rule 1110.2 requires 0.15 gm/bhp-hr	16	118.7	594	33	1	1	0.5	59	3.3	56
Total Daily NOx Emission Reductions Foregone									224	85	139

- a) The number of permitted units (and open applications for units) in these equipment categories are nearly identical to five years earlier and the number can increase or decrease monthly. The average number of units in the permit system is not expected to change with the exception of fuel cells and turbines. As molten carbonate fuel cells with gas-fired heaters currently meet Rule 1147 emissions as built, there are no emission reductions forgone for this category.
- b) Applications have been submitted for three locations; E&C staff believes up to eight locations, so calculated emissions for 10 locations with two 80 hp ICEs (Assumed Tier 3 Compliance) per location operating 60 percent
- c) Actual Existing Emissions, lb/day = Existing Permitted Emissions, lb/day x Average Firing Rate x Percentage of Time Burner is Firing Each Hour x Average Percentage of Units Operating Each Day
- d) Actual Rule 1147 or 1110.2 Emissions, lb/day = Maximum Potential to Emit, lb/day x (Future or Current Limit, ppm)/Permitted Limit, ppm x Average Firing Rate x Percentage of Time Burner is Firing Each Hour x Average Percentage of Units Operating Each Day
- e) Daily NOx Reductions Foregone, lb/day = Actual Existing Emissions, lb/day - Actual Rule 1147 or 1110.2 Emissions, lb/day

Table C-2
Daily NOx Emission Reductions Foregone For Alternative B

Proposed New Rule 222 Equipment Categories And PAR 219 Exemptions ^a	PAR 219 and 222 Criteria	Number of Existing Units	Existing Permitted Emissions (lb/day)	Current Emissions (ppm)	Rule 1147 Limit (ppm)	Average Firing Rate (Percent of Max Rating)	Percentage of Time Burner is Firing Each Hour	Average Percentage of Units Operating Each Day	Actual Existing Emissions (lb/day)	Actual Rule 1147 or 1110.2 Emissions (lb/day)	Daily NOx Reductions Foregone (lb/day)
Power Pressure Washers	< 50 gal Fuel/Day, ≤ 150,000 Btu/hr	261	64	80	40	0.75	0.66	0.75	24	12	12
Asphalt Day Tankers	159 - 4,000 Gallons, LPG - Fired	50	27	110	60	0.9	1	0.75	19	10	8.4
Tar Pots	159 - 800 Gallons, LPG - Fired	143	114	110	60	0.9	1	0.75	77	42	35
Food Ovens	Natural Gas-Fired, ≤ 2 MM Btu/hr	55	59	102	30	0.6	1	0.9	32	9.4	23
Portable Diesel-fueled Heaters	≤ 250,000 Btu/hr	9	2.9	80	40	1	1	0.75	2.2	1.1	1.1
Diesel-fueled Boiler	< 2 MM Btu/hr, > 4,000 Ft Elev, >15 Mi Offshore	5	3.0	80	40	0.5	1	1	1.5	0.7	0.7
Remote Two-Way Radio Transmission Power Source ^b	Rule 1110.2 requires 0.15 gm/bhp-hr	16	118.7	594	33	1	1	0.5	59	3.3	56
Total Daily NOx Emission Reductions Foregone									217	81	136

- a) The number of permitted units (and open applications for units) in these equipment categories are nearly identical to five years earlier and the number can increase or decrease monthly.
- b) Applications have been submitted for three locations; E&C staff believes up to eight locations, so calculated emissions for 10 locations with two 80 hp ICEs (Assumed Tier 3 Compliance) per location operating 60 percent
- c) Actual Existing Emissions, lb/day = Existing Permitted Emissions, lb/day x Average Firing Rate x Percentage of Time Burner is Firing Each Hour x Average Percentage of Units Operating Each Day
- d) Actual Rule 1147 or 1110.2 Emissions, lb/day = Maximum Potential to Emit, lb/day x (Future or Current Limit, ppm)/Permitted Limit, ppm x Average Firing Rate x Percentage of Time Burner is Firing Each Hour x Average Percentage of Units Operating Each Day
- e) Daily NOx Reductions Foregone, lb/day = Actual Existing Emissions, lb/day - Actual Rule 1147 or 1110.2 Emissions, lb/day

ERRATA SHEET FOR AGENDA No. 28
Amend Rule 219 – Equipment Not Requiring a Written Permit
Pursuant to Regulation II and Amend Rule 222 – Filing
Requirements for Specific Emission Sources Not Requiring
a Written Permit Pursuant to Regulation II

BOARD MEETING DATE:

May 3, 2013

Proposed Amended Rule 222

Add the following rule language shown in **TABLE I**.

(b) Applicability

TABLE I

<u>Asphalt Day Tankers, with a maximum holding capacity equal to or greater than 600 liters (159 gallons) but no more than 18,925 liters (5,000 gallons) and are equipped with a demister and burner(s) designed to fire exclusively on liquefied petroleum gases.</u>	<u>5/3/2013</u>
<u>Tar Pots or Tar Kettles, with a maximum holding capacity equal to or greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and are equipped with burner(s) designed to fire exclusively on liquefied petroleum gases.</u>	<u>5/3/2013</u>

(c) Definitions

- (4) ASPHALT DAY TANKER is a storage tank mounted on a motor vehicle and is used exclusively for the storage, holding, melting, and transfer of asphalt or coal tar pitch with a maximum holding capacity **equal to or** greater than 600 liters (159 gallons) but no more than 18,925 liters (5,000 gallons), is equipped with a demister and burner(s) designed to fire exclusively on liquefied petroleum gases.
- (26) TAR POT (also known as a tar kettle) is any mobile equipment used exclusively for the storage, holding, melting, and transfer of asphalt or coal tar pitch and has a maximum holding capacity **equal to or** greater than 600 liters (159 gallons) but no more than 3,785 liters (1,000 gallons) and is equipped with burner(s) that fire exclusively on liquefied petroleum gases.